University of Alberta

East Meets West: A Cross-Cultural Inquiry into Curriculum Theorizing and Development in Physical Education

By

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ABSTRACT

The purpose of this inquiry is to explore East-West interactions in physical education curriculum theorizing and development. Two research questions are addressed: 1) Why should Eastern movement disciplines (EMDs) be integrated into the physical education curriculum? and 2) How can EMDs be integrated into the physical education curriculum?

The theoretical foundations of this research include cross-cultural theories, postmodernism, globalization discourse, reconceptualist curriculum theory, curriculum innovation theory, somatic theory, Dao theory, and Yin-Yang theory.

A mixed methodology of qualitative interviews of 22 participants and quantitative questionnaire survey of 58 participants is utilized to describe student teachers' and practicing teachers/consultants' views of EMDs in physical education curriculum.

Findings reveal that the participants' views of EMDs changed significantly. In a considerably limited period of time (six hours in this case), participants gained sufficient confidence to teach basic EMDs. Participants identified the values and benefits of integrating EMDs in the physical education curriculum with respect to philosophy, culture, variety/diversity, new activity, student/learning, teacher/teaching, and health benefits. In addition, the participants revealed concerns, difficulties, and challenges with respect to teaching qualifications, students, parents, religion, violence, safety, curriculum, and time.

As a result of the findings, 6 themes emerge in the discussion of the first research question (Why should EMDs be integrated into the physical education curriculum?): 1) the values of EMDs, 2) EMDs and philosophy, 3) EMDs and culture, 4) EMDs and a new understanding of health and wellness, 5) EMDs and a holistic view, and 6) EMDs and curriculum. The 2 themes with relation to the second research question (How can EMDs be integrated into the physical education curriculum?) are: 1) general ideas of integrating EMDs, and 2) concerns, challenges and difficulties.

This study concludes that integrating EMDs provides an essential approach to coping with challenges and difficulties in physical education as well as to improving the contemporary physical education curriculum. In turn, EMDs can also be transformed in a hybridized horizon. Therefore, integrating EMDs does not present Eastern culture as superior to or as a replacement for its Western counterpart, but rather as benefiting, re-orienting, and reconceptualizing Western physical education curriculum in order to attain holistic wellness, achieve body-mind harmony, and develop a whole human being.

DEDICATION

I would like to dedicate this work to:

My parents, Xuecheng Lu and Hua Zhang,

My wife, Xiaojian Xu, and

My daughter, Olivia Lu.

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I would like to express my gratitude for the support and advice of my supervisor, Dr. Nancy Melnychuk. Sincere thanks are extended for the time and expertise of other members of my doctoral committee: Dr. David G. Smith, Dr. Larry Beauchamp, Dr. Terry Carson, Dr. Sandra Ubelacker, Dr. Joe Wu, and Dr. Seymour Kleinman (External Examiner). I appreciate their insightful comments and suggestions. I also extend my deepest gratitude and appreciation to the student teachers, teachers, and consultants who participated in my research. Words cannot adequately express what I feel in my heart.

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CHAPTER 1: INTRODUCTION

The East: Europe's "Other"

He who knows himself and other;

Will also recognize that East and West cannot be separated

(Goethe)

Oh, East is East, and West is West, and never the twain shall meet,

Till Earth and Sky stand presently at God's great Judgment Seat.

(Kipling)

My Cross-cultural Journey

Curriculum is not merely a study of design and implementation; it is the study of one's experience (Pinar, 1975). Yet, one's reasons for traveling are often not one's own (Pinar, 2000). My interest in exploring East-West dialogue grows out of my own East-West lived, educational, and professional background.

I grew up in the new People's Republic of China in the post-colonial and pre-modern time when the semi-colonized nation officially ended and the whole country aimed to become modernized in the areas of industry, agriculture, national defense, science and technology, and human quality. Education was regarded as being fundamental to this modernization. All Chinese understood that to modernize China was crucial for Chinese survival in the aggressively Western-dominant world. This campaign has accelerated since the early 1980s with an open-door policy that made China completely exposed to the West.

There was a so-called second enlightenment in China in the 1980s. The first enlightenment in China in the 1910s is also called the New Cultural Movement. As a result, the 2000 year-old imperial system ended. Both enlightenment movements were mainly influenced by Western Enlightenment, Reformation, Renaissance, and modern natural, social, and human scientific theories that predominated in Western Europe and North America.

The Western scientific rationality and social progress fascinated me. I started to put my feet in someone else's shoes—putting myself in the other's position (Gadamer, 1994). Many questions emerged from my thinking. For instance, "Why does China that used to have one of the greatest civilizations in human history lay behind the West? What made this happen? What gave rise to the differences between the East and the West? What is the nature of humans? Where is the human being from? Where are the earth and the universe from? " In particular, the last ontological questions lead me to consult with both Eastern and Western philosophical, historical, religious, social, and cultural theories. What surprised me was that the ancient Chinese philosophies of Daoism, Buddhism, and Confucianism were really appealing to me. Indeed, as Clarke (1997) says, "There are ever-growing numbers of people who continue to feel that the traditional philosophies of the East have much to teach us (whether or not we think of ourselves as orientals or occidentals, or neither)" (p. 14).

One day, I walked outside a campus building in China when there was a World Women's Volleyball championship final game being broadcast on TV. It seemed that every student was gathered in front of the television in classrooms to cheer for the Chinese women's team. This could be the fifth consecutive world championship for the team. This team had been a significant political impetus and had provided cultural spirit for Chinese people throughout the 1980s. Their victory over the West primarily proved that the Chinese still had the confidence and capability to regain their non-inferior position on the modern world stage. Everyone was cheering for every strike the women's team made. I, however, stood outside and pondered why Easterners never attempted to develop the Olympic ideals while Westerners were less likely to give birth to philosophical martial arts. This sharp distinction between the East and the West invited me to further explore East-West philosophy, world history, and cross-cultural studies.

In graduate school, as the president of the Graduate Students' Association of Shandong Teachers' University (STU), I initiated a series of lectures on East-West philosophical and cultural dialogue. As a result, working with three other graduates, I compiled and published the content of those lectures as a special issue in the Journal of Graduate Research in STU. My lecture and manuscript was entitled "A comparison study of Chinese and Western physical cultures." Later on, when I became a professor in the Shandong College of Physical Education and Sport, I extended this research to focus on mutual benefits and influences of Eastern and Western cultures in terms of avoiding cultural narcissism and sovereignty. The accumulated ideas were crystallized in the co-authored paper, *The Eastern-Western cultural influence on physical education and sports* (Lu & Yuan, 1991).

East-West dialogue has become the center of my attention since I came to North America as a visiting scholar, selected and sponsored by the China Scholarship Council to teach Eastern philosophy and movement disciplines. Over the past five years, I have offered a number of regular classes and workshops of Tai Chi, Qi Gong, Chinese health and wellness theories, Chinese philosophies, and Chinese language at the University of Alberta, State University of New York (SUNY) at Brockport, University of Rochester, numerous public and private schools, educational professional development offices, martial arts studios, community centers, senior citizen centers, and rehabilitation centers. I have published 20 videotapes related to Eastern philosophy, health, and movement disciplines in New York in response to an increasing demand for learning Eastern philosophy and movements. In the meantime, I also earned my second master's degree in physical education pedagogy as well as a diploma of American Master Teacher Programs when I was teaching both Eastern and Western movement disciplines in SUNY at Brockport. I fully engaged myself in the Western settings with diverse people from all walks of life. Eventually, as Smith (1999a) states, "Contact, or 'facing' the other, always means examining the ways I am now inexorably different than I was before contact, and things can never be the same" (pp. 79-80). As a result of my lived experiences, I developed a cross-cultural theory, ATUBE:

A: Aware of cultural difference;
T: Tolerate cultural difference,
U: Understand cultural differences,
B: Benefit from cultural difference,
E: Enjoy cultural difference.

My lived cultural experiences, combined with my professional and educational practice, provide me with a rich knowledge and understanding of the significance of

East-West dialogue in the era of globalization. This unique knowledge and understanding prepares me for academic exploration, specifically, in the area of curriculum theory within the framework of a cross-cultural context. I am pleased to conduct my doctoral study in the Faculty of Education at the University of Alberta where East-West dialogue has been appreciated and my experiences have been valued. My work has been supported by a number of scholars and professionals across disciplines, all of whom are very enthusiastic about the intriguing and timely East-West interaction in the area of physical education (PE).

Context of the Study

There is a continuous search for innovative programs in education and physical education to accommodate the youth of today (Fullan, 2001; Jewett, Bain, & Ennis, 1995; Melnychuk, 1990). Globally, it is estimated that more than 60% of adults do not engage in sufficient levels of physical activity that are beneficial to their health (World Health Organization, 2003). In Canada, current estimates from the 1998/1999 National Population Health Survey (NPHS) indicate that the majority of Canadians (55%) are physically inactive, and 57% of adults aged 18 and older are considered insufficiently active for optimal health benefits (Canadian Fitness and Lifestyle Research Institute, 2001). Children and youth in Canada are more inactive than ever before (Canadian Association for Health, Physical Education, Recreation, and Dance, 2001). The 1998/1999 NPHS indicates that 58% of Canadian youth aged 12-19 are physically inactive, and as many as 84% may not have been active enough to meet international guidelines for optimal growth and development (Canadian Fitness and Lifestyle

Research Institute, 2001). In the United States, nearly half of American youths aged 12-21 years are not vigorously active on a regular basis (U.S. Department of Health and Human Services, 1996). The Heart and Stroke Foundation of Canada (2003) recently released findings that 80% Canadians have at least one risk factor for cardiovascular disease (CVD) and 11% have three risk factors or more including physically inactivity, smoking, and being overweight. Physical inactivity costs about 6% of total health care cost in Canada (World Health Organization, 2003).

Physical inactivity has serious and unfavorable consequences on individuals' health, for example, causing a high risk of getting cardiovascular diseases, cancer, non-insulin-dependent diabetes mellitus, osteoarthritis, osteoporosis, falling, obesity, and mental health (U.S. Department of Health and Human Services, 1996; World Health Organization, 2003). Overall physical inactivity is estimated to cause 1.9 million deaths worldwide each year. Physical inactivity causes about 10-16% of cases each of breast cancer, colon and rectal cancers, diabetes mellitus, and about 22% of ischaemic heart disease. The chance of getting a cardiovascular disease increases up to 1.5 times in people that do not meet the minimum recommended amount of physical activity (World Health Organization, 2003). Physical activity is an essential lifelong stimulus for every individual to reach his/her full potential of growth and development as well as to maintain optimal health and functional capacity. It also counteracts various disabilities and diseases. School physical education programs are fundamental to enabling children and youth to develop necessary skills, knowledge, and positive attitudes towards a physically active lifestyle. Studies indicate that the habits children and youth develop early in life will likely to be carried into their adulthood (Canadian Association for

Health, Physical Education, Recreation, and Dance, 2001; World Health Organization, 1998).

However, decreasing physical activity and the reduction of physical education programs in schools are alarming trends worldwide (World Health Organization, 2003). Participation in all types of physical activity declines strikingly as age or grade in school increases (U.S. Department of Health and Human Services, 1996). Abundant studies reveal that many, especially females and lower-skilled students, become alienated from, and drop out of, physical education classes during their public school experiences (Abernathy, 1995; Humbert, 1995; Morningstar, 1991; Siedentop & Tannehill, 2000). Coincidentally, Eastern movement disciplines are increasingly popular outside of the school settings, especially with children and youth. In the West, millions of people of all ages, abilities, and genders, attend private sectors and community services (e.g., YMCA) in those disciplines (De Knop, Engstom, Skirstad, & Weiss, 1996). It is estimated that there is approximately one martial school in every 11,000-resident neighborhood in North America.

Research findings indicate that Eastern movement disciplines (EMDs) are among the most popular extracurricular sports all over the world and are regarded as one of the newest trends in physical activities among children and youth in most countries. There are an estimated three million participants in the 18,000 commercial martial arts schools in the United States alone (De Knop, et al., 1996). Studies also suggest that there are physical, psychosocial, and educational benefits of learning and practicing EMDs (Abernathy, 1995; Morningstar, 1991; Rubottom, 1972; Wright, 2001). However, many children are not exposed to EMDs either in schools or at home due to financial constraints, time, transportation, or parental concerns (Abernathy, 1995).

In the past three decades, scholars and educators have increasingly advocated the introduction of EMDs into physical education classes in public schools, yet these suggestions have only been minimally accepted in North America (Abernathy, 1995; Lyon, 1977; Morningstar, 1991; Reilly & Friesen, 2001; Wright, 2001). An internationally recognized journal contributing to professional development of physical education, the Journal of Physical Education, Recreation, and Dance (JOPERD), presented various opinions in its November/December 2000 issue, entitled *Should martial arts be taught in physical education classes?* In fact, studies have indicated that EMDs are being introduced during regular physical education classes in schools in most European counties (De Knop, et al., 1996). Research finds that physical education teachers in two-thirds of the European countries (De Knop, et al., 1996) and 64% of the physical education departments in higher institutions in the United States offer some kind of martial arts classes (Chen, 1998). Self-defense seems to be the dominant motivation for students to learn and for exponents to advocate EMDs in the West. The essence and second dimension of EMDs, Eastern meditation disciplines, have been abandoned (Chen & Mauk, 1999; Boudreau, Folman, & Konzak, 1995). In addition, the escalating number of multicultural societies and the increasing immigrants in the world indicate a pressing need for culturally sensitive research in education (Kausar, 2000)

My study investigates the value and benefits of Eastern holistic approaches to mind/body/spirit health for children and youth in public schools in North America. My focus on North America as a part of the West is consistent with Said's (1978) explanation of Orientalism where Asians' experiences of North America can nest within their experiences of the West. In addition, although there are tremendous differences among Western cultures, the East tends to view the West as a cluster of cultural phenomena with significant similarities that are of ancient Greek origin (Lee, 1993).

Purpose of the study

The purpose of the study is to explore the values and possibilities of EMDs for school physical education curriculum, and to investigate the challenges, concerns, and difficulties of integrating EMDs into physical education curriculum.

This study will hopefully improve physical education programs through the integration of EMDs. It will also seek to understand the concerns and misunderstandings surrounding the integration of EMDs in physical education curriculum in the West. These concerns include the perceived violence or, paradoxically, the religious or spiritual elements of EMDs. In addition, there are worries regarding possible injuries as a result of integrating EMDs (Kleinman, 1986). There has been an increase in literature promoting the integration of EMDs into physical education programs, but very few studies have addressed the philosophical and cross-cultural constructs of contemporary physical education programs, especially from an East-West joint perspective.

Research Question

The primary intention of this study involves conducting a theoretical investigation with pre-service teachers, in-service teachers, and consultants in physical education. This study seeks an understanding of the theoretical foundations and practical possibilities and challenges in the area of cross-cultural curriculum theorizing and development. Therefore, the general research question asks, "How do Eastern and Western cultures interact with each other in the area of curriculum theorizing and development in physical education?" More specifically, the research questions will ask:

1. Why should EMDs be integrated into physical education curriculum?
2. How can EMDs be integrated into physical education curriculum?

Significance of the study

My research actively participates in East-West dialogue of the post-colonial and globalization era. Through exploring the possibilities of integrating EMDs into the physical education curriculum, this research seeks to contribute to academic domains of cross-cultural studies and curriculum development. This project may generate a possible cross-culturally hybridized framework in the context of reconceptualizing curriculum theories and practice in physical education. This study may also provide a provocative effort to extend the boundaries of reconceptualists' understanding (Pinar, Reynolds, Slattery, & Taubman, 1995). The rigorous exploration may also reveal a deeper understanding of holistic approaches to body-mind oneness, health and life, personal well-being, self-awareness, self-responsibility, moral character and harmonious relations (Abernathy, 1995; Kleinman, 1986; Lu & Yuan, 1991; Park, 1996). The study will enrich our pedagogical orientation to education through the physical (Coville, 1983), better stress management and violence reduction (Wright, 2001), and foster our understanding and practice of cultural pluralism and peace education in public schools (De Sensi, 1995; Smith, 2002a, 2002c).

If EMDs play a role of channeling Eastern culture to the West, a study of integrating EMDs into Western physical education programs would contribute to our understanding of this acculturation process. It may facilitate the "internationalization" of EMDs because EMDs in today's world should be understood within a multicultural perspective in the era of "globalization."

As a result of the study and as an EMDs instructor and researcher, I may have an opportunity of reconceptualizing EMDs and obtaining new meanings of EMDs. For example, I will reflect and examine how traditional philosophies, techniques, norms, criteria, and concepts in teaching EMDs have been adjusted to accommodate diverse needs in the West, and I will eventually lead the learners back into the traditional paradigm, particularly the philosophies, of EMDs.

The insights and findings may also help to better understand the body-mind issue. Yet, the reason I emphasize the physical dimension of holistic education is that physical activity is the common thread and the anchor in all my professional experience. Physical activity is a vehicle for communication through which other learning can occur.

Definitions of Key Terms

The East: Asia, the orient (Said, 1978), specifically, the South and East Asia. These countries have shared a similar culture (Smith, 2002a; Tu, 2000). For the purpose of this study, I have limited my examination of the East to three countries, China, Japan, and Korea. Emphasis is placed on Chinese culture and philosophy because China has significantly influenced the formation and transformation of the other two (Lee, 1993).

The West: the occident, namely, North America and Europe geographically and culturally.

Eastern Movement Disciplines (EMDs): a cluster of activities based on certain Eastern philosophies and developed historically and geographically in Asian contexts, which consists of Eastern martial arts (e.g., Aikido, Judo, Karate, Kung Fu, Tae Kwon Do, Tai Chi) and Eastern meditation practice (e.g., Qi Gong and yoga). It holds basic values of philosophy, health, education, and culture.

Eastern martial arts: combative systems with a common origin in the East.

Tai Ji (太极): refers to one of the Eastern ancient philosophical concepts, "Tai" (太) for "very" or "supreme" and "Ji" (极) for "top" or "end."

Tai Ji Quan ("Tai Chi" in English, 太极拳 in Chinese): It is a unique Eastern martial art appearing with its slow gentle movement based primarily on Daoist philosophy.

Qi (气): Qi has three levels of meanings: 1) Qi in common sense (e.g., air, water, and food); 2) Qi in philosophy (e.g., equivalent to being or substance—an abstract concept opposite to human thinking); and 3) Qi in broad sense (e.g., any material and spiritual phenomena) (Li, 2001).

Qi Gong (气功): sometimes is translated as "Chi Kung." It is a type of Eastern meditation that may be involved with or without physical movement. "Qi" here refers to vital energy. "Gong" here denotes the skill or technique and cultivation (Dictionary Compiling Unit of Language Research Institute of Chinese Academy of Social Science, 2002).

Student teachers: also called "pre-service teachers." They are students who enroll in teacher education programs in post-secondary education. They are endowed the title of "student teacher" or "pre-service teacher."

Practicing teachers: also called "in-service teachers." They are teachers who are currently teaching in real school settings.

Consultants: also called "supervisors." They are usually experienced teachers in certain subject areas. They are responsible for supervising and/or being consulted by teachers in their respective subjects and in their own school districts. They may work full-time as consultants or part-time as regular teachers.

Summary

Western physical education is facing growing challenges, which also provide an opportunity for meaningful innovation. The increasing popularity of Eastern movement disciplines in Western society beckons an inquiry into multicultural issues in the context of integrating Eastern movement disciplines in curriculum theorizing and development. My doctoral research derives from my lived experience in the East and West, culturally, educationally, and professionally. I hope that integrating EMDs will lead to the improvement of physical education programs and awareness of other approaches to physical education and health in the West. This study will explore how different cultures interact, specifically, why EMDs should, and how EMDs can, be integrated into Western physical education curriculum.

CHAPTER 2: THEORETICAL FOUNDATIONS

The Dao that can be told of is not the absolute Dao;

The names that can be given are not absolute names.

(Lao Zi)

This study is underpinned, consolidated by, and contributes to a certain extent to the domains of cross-cultural studies, postmodernism, globalization discourse, reconceptualist curriculum theories, curriculum innovation theory, somatic theory, and Eastern fundamental philosophies (Dao and Ying-Yang theories).

Cross-cultural Theories

Gadamer is a great hermeneutical scholar and devotes his life to inquiry into the grounds of human understanding (Smith, 1999c). Gathering the ripe fruit of his lifetime teaching and thinking, his *Truth and Method* (1994) is considered one of the two or three important works of the twentieth century on the philosophy of humanistic studies. Gadamer (1994) recognizes Wilhelm von Humboldt's belief that human beings almost always carry their own worldview when encountering a new culture. For example, using a new foreign language gives us a new standpoint on our previous worldviews. However, we may adopt a foreign frame of mind, and yet, do not necessarily forget our own worldviews. "Rather, the other world we encounter is not only foreign but is also related to us. It has not only its own truth *in itself* but also its own truth *for us*" (p. 442).

The idea of the "fusion of horizons" (Gadamer, 1994) helps us understand the dynamics of cross-cultural curriculum studies. Gadamer refers to the limit beyond which a person can see as a horizon, a "range of vision that includes everything that can be seen from a particular vantage point" (p. 302). He states that prejudices constitute the horizon of a particular present beyond which it is impossible to see. However, a horizon is not a rigid boundary but rather something that invites one to progress further—opening up of a new horizon. To obtain a horizon means that one learns not to look away from it but to see beyond what is nearby and see it better within a larger whole and in truer dimensions. Gadamer (1994) continues,

> A person who has no horizon does not see far enough and hence overvalues what is nearest to him. On the other hand, "to have a horizon" means not being limited to what is nearby but being able to see beyond it. A person who has an [sic] horizon knows the relative significance of everything within this horizon, whether it is near or far, great or small. (p. 302)

He signals that dialogue leads to understanding in the borderlands of cross-cultural endeavors. In so doing, he suggests that we have to transpose ourselves or put ourselves into each others' shoes for the sake of understanding each other.

Bhabha identifies a Western transparent form of assimilating other cultures as "these other cultures are fine, but we must be able to locate them within our own grid" (Rutherford, 1990, p. 208). This norm is given by the host society or dominant culture; however, other forms of cultural differences have been normalized and homogenized. Bhabha (1994), when asking where we draw the line between cultures, offers a "third space" that "may open the way to conceptualizing an international culture, based not on the exoticism of multiculturalism or on the diversity of cultures, but on … culture's hybridity" (1994, pp. 37-38). To him, hybridity is the "third space" that enables other positions to emerge and different voices to be heard. Being enthusiastic about this new notion, he expresses that the process of cultural hybridity gives rise to something different and a new area of negotiation of meaning and representation. Yet, he cautions, "I felt that the possibility of producing a culture which both articulates difference and lives with it could only be established on the basis of a non-sovereign notion of self" (Rutherford, 1990, p. 212).

It is only by losing the sovereignty of the self that the oppressed can gain the freedom of politics that is open to the non-assimilationist claims of cultural difference. He asserts that, "The time for 'assimilating' minorities to holistic and organic notions of cultural value has passed—the very language of cultural community needs to be rethought from a postcolonial perspective" (Bhabha, 1994, p. 219). Postcolonialism, therefore, operates through the dimensions of time (history) and space (e.g., third space of cultural reconceptualization and the reordering of the world).

Another postcolonialist scholar, R. J. Young, agrees with Bhabha. Young (2001) states that the third space allows the activities by which new subaltern histories, new identities, and new conceptualizations of the world—transnational rather than Western—are fashioned and performed, and through them seeks to redress current imbalances of power and resources in the pursuit of more just and equitable societies. He encourages us to dislocate Western knowledge, to challenge the form of Western historicist history that subsumes all other histories of the world, to question the philosophical and sociological cannons for their exclusions of writing that have not stemmed from the metropolitan center, and to develop contestatory dialogues between Western and non-Western cultures.

Through conducting such intercultural dialogue, "seeds are being planted for a more hybrid and holistic view of education and humanity. Such hybridized view and approaches to education will find further fertile ground to take root and thrive" (MacPherson, 2001, p. 33).

Cross-cultural psycho-sociologist, Berry's work has been adopted in many academic disciplines. His conceptual framework represents his lifetime research on intercultural relations in Canada. Berry (2001) and many other cross-cultural psychologists and sociologists such as Bourhis, Moise, Perreault, and Senecal (1997), suggest that mutual respect, accommodation, and change, rather than simply assimilation, marginalization, or separation in culture interactions are required for dynamic integration, acculturation, and inter-group relations. In addition, decades of anthropological research have revealed that different cultures actually do have a shared set of characteristic customs and attributes (Berry, 2001). The work by Campbell (1967) indicates that the greater the real differences are between two groups, the greater the likelihood that each will appear in the other's stereotypes. We should not fear or hesitate to accept the differences between cultures by asking whether or not the differences contribute to inter-cultural relations.

Postmodernism

Postmodernism plays a similar symphony within the different orchestras with

Postcolonialism. It is probably the most comprehensive of recent theory and the most difficult contemporary theory to assess (Kumar, 1997). Postmodernists abandon "grand narrative" and open the door for the freedom of "little narratives" (the "play of differences"— Jacques Derrida) that do not depend on external, objective validation but self-legitimating and show a "sensitivity to differences" with a willingness to "tolerate the incommensurable." Postmodernism renounces absolute standards and universal categories in favor of local, contextualized, and pragmatic conceptual strategies. Postmodern theorists also abandon the subject-object dichotomy and assert that the construction of knowledge has to be engaged, perspective, hermeneutic, and pluralistic rather than abstract and monolithic (Quinn, 1998). Postmodernist theory stands in the battlefield to oppose and transcend the tendencies of both modernity and modernism.

Derrida names modernist character as the logocentric characterized as hierarchical, imperial, hard, argumentative, well defined, analytical, declarative, war-like, or punitive. In contrast, the post-modernist character is considered to be relational, ecological, modest, conversational, intuitive, somewhat mysterious, interpretive, and always open to the play of possibilities inherent in the heart of life. Post-modernism accepts the fact that the surface of things also contains a deep structure that must be interrogated for the surface to be understood as such (Smith, 2001). The postmodernist pedagogy, according to Smith (2001), suggests that we should learn how to live with the world, rather than against it in the name of some unrealizable pure identity.

"Postmodernism opens the door for the suppressed and marginalized voices of history (women, aboriginals, non-Westerners) and it provides a language for decentering the authority (hegemony) of the Western tradition" (Smith, n. d., p. 2). Smith (n. d., p. 2) provides modernist and postmodernism frames of curriculum and teaching as showed in Table 1 (see page 240).

Globalization Discourse

The term of globalization has been increasingly circulated around in the past ten years. Smith (2001) states that it sounds magnificent to allow people to think globally on one hand. Yet, the same impetus carries disastrous dangers by serving as a legitimate device for dominating others in the name of one's own projections within the Euro-American tradition.

Historically, globalization involves a mixture of economical, political, cultural, and technological forces initiated by neo-liberalism, promoted by Reagan and Thatcher administrations of the United States and the United Kingdom respectively, and formed by the International Monetary Fund (IMF) and World Bank along with other international organizations mainly dominated by the United States. It represents Euro-Americanism and aims to create a global free market above all nations. It gives rise to weakening state health care, welfare, unions, and public education (Smith, 2001; Spring, 1998).

Smith (2002a) contends, "Globalization is fraught with various new kinds of identity crises, ranging from eroding senses of national identity to unprecedented losses of indigenous languages and cultures under the homogenizing pressures of global capital" (p. 49). He distinguishes three forms of globalization operating in the current world. Globalization One embodies the dominant form generated from neo-liberalism in 1980s; Globalization Two shows a variety of responses to the Globalization One from all over the world; and Globalization Three represents the dimensions that may arise for new global dialogue pertaining to the sustainability of human futures. Smith (2002a) proposes: "In any condition of healthy living together, humanly speaking, there must be a *sharing of horizons* of understanding…" (p. 70) and that "sharing of horizons points to the way my horizon is never just 'my' horizon, but one that opens out on to that of another, and as such is in a condition of perpetual revision toward a more comprehensive understanding and appreciation of the broader world" (p. 72).

Smith (2002b) advocates that in the new inter-civilizational dialogue that will mark any viable global future, teachers may have a significant role to play in mapping out a kind of relational hermeneutics that shows that the way of honoring differences in the context of a common place. He also transforms Descartes' private enterprise model of epistemological and ontological certainty, "I think therefore I am," to a more appropriate saying, "We are, therefore I am" (2002c, pp. 104-105).

MacPherson (2001) argues that globalization is never entirely global but rather transnational or post-national. "… The struggle to break out of a Western-dominated mono-cultural and assimilationist society has been highly significant for education" (Brown, Halsey, Lauder, & Wells, 1997). Globalization has meant that curriculum development often takes place outside national boundaries (Binder, 2002). With globalization of curriculum, a concern arises regarding the transference of curriculum concepts and processes from one cultural context to another, particularly in transplanting Euro-American curricular models and practices to other cultures. Curriculum reconceptualists such as Pinar, Reynolds, Slattery, and Taubman (1995) also notice international debates surrounding the impact of imported curricular materials.

Reconceptualist Curriculum Theory

Reconceptualists, a "third force" in addition to traditionalists and conceptual-empiricists in the field of curriculum studies, appeared during 1970s. This group of scholars draws on the perspectives from critical theory of the Frankfurt School and ethnographic studies of Neo-Marxism. Reconceptualists tend to associate themselves with hermeneutic and phenomenological traditions with an emphasis on subjectivity, existential experience, artistic interpretation, and centrality of understanding human action in their theoretical framework. There are three stages of the reconceptualist development: 1) accumulating tradition, 2) being critical of self via others (e.g., colleagues), and 3) turning attention from the past (criticizing traditionalist and conceptual-empiricist) to the present and to the future, namely, introducing existentialism and phenomenology to the field, in order to provide conceptual tools by which we can understand human experience of education.

Concerning themselves with the internal and existential experience of the public world, reconceptualists condemn the narrowly practical operation, the atheoretical and acontextual posture, the imitation of scientific method, and the apolitical and ideological function in the curriculum field. As a mode of theorizing, reconceptualist theory is a distinct and integrated school of thought whose practitioners reject the positivistic and conservative nature of existing curriculum theory and practice, examples of which include "curriculum design or development—implementation—evaluation" in traditionalist manufactory orientation and "hypothesis—testing—generalization" in conceptual-empiricist scientifically methodological habituation (Pinar, 2000). A real reconceptualist should also acknowledge the historical and social view of curriculum development and be aware of the complexity and historical significance of curriculum issues. "Because the difficulties these reconceptualists identify are related to difficulties in the culture at large, they are not 'problems' that can be 'solved'" (Pinar, 1981, p. 94).

The core of the reconceptualist mode of theorizing takes many forms to make the human subject a primary focus of concern and to question how people generate meaning rather than how people master someone else's meaning (Giroux, Penna, & Pinar, 1981). It extends the horizon of curriculum theory to embrace the hidden curriculum as well as the evident one. Reconceptualist theory is descriptive, not prescriptive, in its critical exercise with an intention of studying the meaning of educational practice and discovering what might have been and what still may be. Pinar and Grumet (1980) claims:

> It presses back the categories of learner and curriculum to the relations that bind a person to his or her particular cultural, historical and political situation and then dissolves that person and that setting into the ineffable possibilities of the psychological individual making a home in the natural world. (p. 25)

Reconceptualists not only tolerate other forms of curriculum theories but also promote nurturing a curriculum "internal dialectic," through which one's own view may be enriched and an intellectual climate created in order to eventually make a truly significant contribution to curriculum studies.

Although there is a relatively small group of scholars and professionals, the significant role that reconceptualists are playing in the curriculum field deserves our full attention. Currently there are two subgroups in this mode of theorizing: one serves as criticism of the old curriculum traditions (traditionalist and conceptual-empiricist) and the other one with a "post-critical" disposition tends to shift from criticism of the old to creation of the new.

The challenge for reconceptualists is not only to analyze and constructively criticize, but also to provide the curriculum field with alternatives. "The task of the next fifty years in the curriculum field is essentially one of developing alternatives to the mode of thinking and the limited framework that has so clearly dominated the first fifty years" (Kliebard, 1976, p. 49). A place to start, as suggested by van Manen (1978) in his review of reconceptualists, is to shift ways of thinking by borrowing from other traditions. For instance, Coville (1983) in her reconceptualization work suggests that the Eastern philosophy of Zen, and its practices of yoga and Kendo offer such a shift.

Curriculum Innovation Theory

Fullan's study of the meaning of educational change is among the most influential work in the area of curriculum innovation in the West. He states, "The problem of meaning is central to making sense of educational change" (2001, p. 8), and the "meaning" must be best achieved with respect to the "what' and "how" of change. We should strive for the deep meaning, rather than superficial one, about new approaches to both teaching and learning. "Meaning will not be easy to come by given this goal and existing cultures and conditions" (p. 38).

He cautions that the "change" should not be viewed as a race to see who can be most innovative, but rather should focus on "the key words such as meaning, coherency, connectedness, synergy, alignment, and capacity for continuous improvement" (2001, p. 19). He criticizes that many people in education get accustomed to endless change but they hardly stop to think what change really means as they articulate it at a personal level. Changes should be a result of adaptations and decisions made by teachers as they work with particular programs, and the program and the teacher's sphere mutually determine the consequence. Changes in understanding and beliefs are the foundation of achieving lasting reform.

Fullan (2001) introduces eight main recommendations suggested by the Carnegie Council on Adolescent Development (CCAD) for understanding educational change:

A. creating small, respectful communities for learning;
B. teaching a core of academic knowledge;
C. ensuring success for all students;
D. empowering teachers and administrator;
E. preparing teachers for the middle grades;
F. fostering adolescents' health and fitness;
G. re-engaging families in the education of young adolescents; and
H. connecting schools with communities.

He points out three necessary components or dimensions at issue in implementing any new program, all of which represent the means of achieving a particular educational goal or set of goal:

A. the possible use of new or revised materials (instructional resources such as curriculum materials or technologies),
B. the possible use of new teaching approaches (i.e., new teaching strategies or activities), and

C. the possible alteration of beliefs (e.g., pedagogical assumptions and theories underlying particular new policy or program).

Most researchers agree that there are three broad phases to the change process in education (Fullan, 2001).

Phase 1: Initiation (mobilization, or adoption): refers to a process that leads up to and includes a decision to adopt or proceed with a change.

Phase 2: Implementation (initial use): involves the first experiences of attempting to put an idea or reform into practice.

Phase 3: Continuation (incorporation, routinization, or institutionalization) consists of whether the change gets built in as an ongoing part of the system or disappears by way of a decision to discard or through attrition.

In fact, many teachers do innovate. Fullan (2001) argues that numerous small innovations occur everyday in regular school settings, opposing the prejudice that teachers simply have less opportunity to come into contact with new ideas and less time and energy to follow through on what they become aware of. It is teachers' working conditions in the majority of schools that are not conducive to sustained teaching innovation. On a larger scope, local, provincial (state), and national teacher unions in some cases are becoming strong advocates of reform (Consortium of Educational Change, 2000; Shanker, 1990). Research findings imply that many teachers are willing to conduct change at the individual classroom level and will do so under certain supportive conditions (Fullan, 1997; Fullan & Hargreaves, 1992; Hargreaves & Fullan, 1998).

Fullan (2001) indicates that there are three categories that contain nine key interactive factors for innovative curriculum continuation:

A. Characteristics of change
   1. Need
   2. Clarity
   3. Complexity
   4. Quality

B. Local characteristics
   1. District
   2. Community
   3. Principal
   4. Teacher

C. External factors
   1. Government and other agencies

Larry Cuban (1992), a scholar of curriculum stability and change theory, claims that all of the three following common assumptions or beliefs in relation to curriculum change are problematic: 1) The planned change is positive or progressive; 2) Change in districts and schools is divorced from stability, which means either undergoing change or static; and 3) Once plans designed by educators are adopted, improvement occurs.

Fullan (2001) asserts that teachers of today and tomorrow need to learn more on the job in order to live with changes. If the unpleasant condition stays, we will always have only a minority who can persist against many odds. "Rather, we must change existing conditions so that it is normal and possible for a majority of people to move forward" (p. 269).

Somatic Theory

Although the term somatics appeared during the 16th century, Thomas Hanna is credited for being the primary founder of contemporary somatic education. He defined somatics as "the art and science of the inter-relational process between awareness, biological function and environment, all three functions being understood as a synergistic whole" (Hanna, 1994, p. 1). To him, somatics is the field that studies the soma (the body) as perceived or experienced by the first person. When a human being is observed from the outside, for example, from a third person's viewpoint, the phenomenon of a human body is perceived. "Soma does not mean body; it means me, the bodily being" (Hanna, 1970, p. 35). Yet, when this same person is observed from the first person's viewpoint, a different phenomenon is perceived: the human soma.

According to Hanna, the inquiry of "human being" is divided between the science of psychology and somatology. As a study of living bodies, "somatology continued as an envisioned new science until the positivism of the late 19th century broke it asunder by subdividing somatology into anatomy and physiology. The holistic intention of somatology was thus abandoned" (Hanna, 1994, p. 4). He, as well as many other somatic somaticists, has been greatly inspired by pragmatism and phenomenology (Kleinman, 2003).

Pragmatism, aligning itself with phenomenology and somatics, is one of the first philosophies to reject Platonic and Cartesian dualism (Mechikoff & Estes, 2002). Hanna considers pragmatism as a philosophy of "how to clarify and understand one's own somatic functions and, more, how to control and improve them" (quoted in Greene, 1995, p. 89). Greene (1995) believes that pragmatism provides the thrust for somatic philosophy and paves the way for theoretically legitimizing somatic practice. Pragmatists such as John Dewey and William James argue that body is not inferior to mind. In addition, mind is situated in body everywhere, not at a specific location. Humans are embodied entities. The mind or spirit is of the body; and that mind and body are integrated into one entity (Thomas, 1983).

> Pragmatism has the first position to view the body as having value in and of itself rather than just serving the mind. The idea that all knowledge is based on experience of a person suggests an integration of mind and body. This testifies to the value of the body as a source of knowledge. (Thomas, 1983, pp. 32-33)

Pragmatists believe that one's physical experiences (through the body) are where one comes to know reality (Mechikoff & Estes, 2002). Mind and body, as well as thought and action, are not detachable. "The implication of this position is that human behavior cannot and must not be subdivided into bits and pieces. We think and act as total, unified organisms. Therefore, our approach to teaching and learning should reflect this" (Kleinman, 2003, pp. 2-3). Physical education should educate the "whole" child *through*, not *of*, the physical.

Merleau-Ponty builds his exploration into phenomenology on the central topic of the body-subject. For him, the human being is not the object of senses or the intellect. Rather, "man was a unity, difficult to understand and still more difficult to describe and analyze, yet so fundamental that neither man nor the world could be understood unless seen in this perspective of unity rather than union" (Barral, 1965, p. 47). He states, "I am my body, I am a point of view on the world" (Merleau-Ponty, 1962, p. 8). To him, the body is the being that is acting and living in the world. A person's consciousness through his/her body is his/her "vehicle of being in the world" (p. 82). To him, there is no inner person—a person is the world and only in the world does one know oneself. Van den Berg (1952) remarks that the subject was supposed to be in the body, and therefore the place of the subject was inseparably connected with the boundaries of the physical body. Similar to pragmatism, a phenomenological approach values the body and the world of experiences available to the physical individual. The body becomes a source of knowledge and personal development, and not the enemy of reason or an obstacle to knowledge as illustrated in dualistic philosophies.

Seymour Kleinman, another somatic advocate, notes, "Experience demonstrates that we are most 'at home' with ourselves when we are not consciously contemplating our actions but totally immersed in activity itself" (Kleinman, 1972, p. 369). This "at homeness" arrives as a result of pre-conscious and pre-reflective and intimate knowledge of our body selves. The process of physical education enables students to enhance this "at homeness" rather than increase alienation. He continues: "For a long time philosophers have been concerned with what appeared to be two aspects of existence; that of the physical and that of the spiritual or mental…The relationship between these two worlds (aspects), and the nature of their reality, constitutes what has been classically called the 'mind-body' problem, and philosophers from Plato through contemporary existentialists" (p. 324) have struggled with this. The body-mind relationship is important to physical educators because what we know and how we teach is determined by one's philosophy and paralleling position about the mind/body relationship (Fairs, 1968).

Somaticists accuse Plato of being one of the first to make a sharp distinction between body and mind (Mechikoff & Estes, 2002). Plato's metaphysical dualism divides humans into a corporeal existence and a mental/spiritual existence. Plato thought that the mind could exist before, during, and after its residence in the body. For him, the mind is infinitely superior to the body, and it is immortal, whereas the body is both transient and mundane. He not only separates the mind from the body, but also relegates the body to a lower level of existence as befitting what is impure, transitory, and suspect. He discusses the soul's capability for pure knowledge and how the evil body infects and confuses the mind/soul. Death will liberate the soul from the limitations of the body. By ridding the evil body, the mind/soul will have the capability to obtain unadulterated knowledge. Plato thinks that human life is a process of rediscovering all those things that the soul/mind experiences as knowledge or truth before it is assigned to the body.

Yet, Plato regards the development of the body as a crucial educational goal. He considers the well-trained body a more suitable home for the immortal soul than the untrained one. The body will not contribute to knowledge, but it will hamper the mind if it is sick. There must be balance and harmony in the education of his citizens, which does not imply equality. In his *Republic*, Plato strives to construct the first utopia in literature: the education of the citizens is crucial. He considers gymnastics (for the body) and music (for the mind) as the two components of the curriculum, which reinforces and perpetuates the dualistic approach to education that continues to this day. But he values the trained body only as a means toward an end, not as an end in itself. To him, the soul must control the body; the body can exercise an enslaving influence on the soul as in the case of unhealthy habits and overemphasizing physical training (Mechikoff & Estes, 2002).

Descartes first develops a systematic theory of the nature and interrelationship of mind and body. He establishes a dualism separating body and mind so absolutely that they are held to be entirely distinct. The nature of the body and that of soul have nothing in common. Therefore, it is his inevitable conclusion that the mind or soul need no knowledge of, and need not depend on, the body in order to exist. He claims that body and mind are so independent of the other that either could exist without the other. The mind is a conscious and immaterial substance whereas the body is an unconscious and material substance. According to Cartesian theory, the mind does not require external stimuli for its intellectual development, nor can it trust bodily sensations as a source of knowledge, which means knowledge cannot be gained through physical activity, but only through rational thought. He believes that the material world, including all living bodies, is in some sense a machine. Clearly, Cartesian dualism places the intellectual above the physical. However, he admits that the body is necessary for human existence. Descartes' approach to the body and mind relationship is still prevalent in education today where matters of the mind are considered more important than matters of the body. Cartesian dualists argue body and mind are ultimately separate entities but they can interact with one another. However, few of those dualists can adequately explain how this process occurs (Mechikoff & Estes, 2002).

Somatics aims at rediscovering the unit of body, mind, and spirit. It also addresses the wholeness that includes relationships, such as, between self and other, individual and group, inner and outer, and public and private. Western somatic approaches, based on physiology and anatomy, apply sequences of movement, breathing, meditation, imagination, visualization, sounding, and hands-on work to educate and help clients and students. Despite their differences, all somaticists emphasize the principle of self-cultivation and self-care. This is the best way to defend and protect the self against disease. Through self-awareness and self-exploration, one can explore the body "from the inside out," thus gaining a deeper sense of listening and overcoming the false separation between body and mind (Lin, 2000). As matter of fact, Hanna somatics, as well as Alexander Technique, Feldenkrais' Awareness through Movement, Swiegard's Ideokinesis, Trager, and Body-Mind Centering developed in the West have all used instructions similar to or including "becoming aware of the body," "listening to the body," "noticing what is going on," "paying attention," or "experiencing the body from within" (Lord, 2002).

North (1977) observes that the "phenomenological consciousness" has mapped out the largely unexplored in Western culture. The Hindus, Buddhists, Zen masters, and various assorted sages, who were governed by a mythical reality quite alien to Western culture, have explored this area. It is possible to profit from their explorations. In addition to this, Hanna (1986) asserts:

> The rapid growth of somatic consciousness in the West has opened the eyes of Westerners to an Eastern way of thinking that has always been somatic. Rather than being held down by the crippling structures of an either/or, back and white, mind/body schism, the Asians have always seen shades of gray between mind and body. This is to say that the Asian viewpoint wisely and correctly sees the human being as single unity with

> many gradations, whereas the Western viewpoint has seen the human as a phantasmagoria of matter and spirit with no real connection. The Asians have been blessed with a unitary, holistic conception of human nature; the occidentals have been cursed with a Hellenic-Christian conception of human nature. The former sees the human as an integrated unity, the latter as a disintegrated duality. (p. 180)

As a result of personal experience and lifetime investigation, Kleinman (2003) has to come to the conclusion that the separation of mind from the body in the West causes the occidental to view human beings in an "unnatural way." "This creates problems and unhealthy practices, particularly in the field of education" (p. 1). The Western conception of a person that consisted of two separate and distinct entities, a mind and a body, at one time may have been convenient for a society that was engaged in creating and discovering a world of science and technology. The scientific method encourages the process of categorizing, ordering, and analyzing phenomena and behaviors. It enables us to provide explanations that seem rational and logical. Therefore,

> The apparent success of science in explaining things through reduction, analysis, and quantification, coupled with the Western theological and philosophical commitment to the notion of a person having spiritual and mental dimensions as well as physical ones, continues to reinforce our attitude toward—and treatment of—human being as combination of elements connected to each other in some mysterious way. The concept of a person as unity is one that has been only recently discovered (may be more accurate to say rediscovered) in the West. (p. 1)

Hanna (1986) regrets that the Western tradition of education has split and impoverished both bodily and mental education by demeaning the former and disembodying the latter. An educational system of self-responsibility would find that physical education was of equal importance to mental education. Hanna points to the inevitableness of the emergence of a somatic culture. He believes that Eastern movement disciplines are a special gift to Western culture because they restore to human beings their *depth*. He suggests, "The ethics and science of self-responsibility combine with the religious and martial disciplines of Asia to teach us that our physical well-being and our emotional and intellectual well-being are far more in our own hands than our medical and therapeutic and academic traditions might wish us believe" (p. 180). He indicates that it is not an effortless transformation. "After spending thousands of years to hop around on one leg, it feels awkward and unnatural to walk on two" (Hanna, 1970, p. 207).

Dao (道) Theory

"Dao" (also "Tao" in English, 道 in Chinese) is one of the oldest philosophical concepts in the East prior to all religions, including Daoism (Taoism). Yet, it has been frequently employed in Buddhism, Confucianism, and especially Daoism. The Dao theory is the ontology of Chinese philosophy and the basis of epistemology in EMDs (Chinese Philosophy Unit of Philosophy Department of Beijing University, 2001; Xu, 1996).

As one of the most eminent intellectuals in the East and the primary founder of Daoism, Lao Zi (Lao Tzu or Lao Tse) explains that the "Dao" gives birth to Yin-Yang and eventually to everything in the universe. The Dao is independent of human's will and fundamentally decides everything. He poetically wrote:

> Something, in veiled creature, came to be
> Before the earth was formed, or heaven.
> In the silence, apart, alone,
> It changes not, is ever present, never failing
> Think of it as Mother of everything.
>
> For me it is Nameless.
> But call it Dao.
> Needing a title, a name,
> I call it Great.
> Being Great, it is boundless.
> It flows; it reaches far,
> Then flowing, it returns.
>
> The Dao, then, is Great.
> Heaven is Great;
> The Earth is Great;
> And the King, too, is Great.
> In all the Universe,
> There are the Four Great Powers,
> And of the four, the King is but symbol.

> Man obeys the Earth;
>
> Earth obeys heaven;
>
> Heaven obeys the Dao;
>
> Dao is obedient to its own nature. (Lao Tse, trans. 1991, p. 53-55)

Dao might be deemed as the concept that facilitates the explanation of the origin or the general law of the universe. Nothing can be bigger or smaller than Dao because it has no outside and inside. One meets Dao and finds that it has no front; one follows it and sees that it has no rear (Jou, 1981). Lao Zi encourages people to use internal sense organs to attain knowledge and understand the Dao:

> Without going out of your door,
>
> You can know the ways of the world.
>
> Without peeping through your window,
>
> You can see the Dao of Heaven.
>
> The further you go,
>
> The less you know. (p. 110)

It is through the internal body that one can understand the Dao and life. The Dao exists in everyone's body as well as in the universe. He lets us question ourselves:

> Can you keep body and mind at one with Dao?
>
> Can you concentrate on Qi and achieve softness to make yourself like a supple newborn baby? (Lao Tse, trans. 1991, p. 21)

Huang Di Nei Jing (HDNJ), written approximately 4700 year ago, is regarded as the oldest as well as the greatest Chinese well-being and medical masterpiece. It is still esteemed as the highest authority in traditional Chinese medicine (TCM) theory and practice (Wang & Wu, 1932). According to HDNJ, the fundamental cause of disease is the violation of the Dao. Therefore, the treatment requires that one conforms to the Dao and balances the Yin-Yang. The role of Traditional Chinese Medicine (TCM) and Eastern movement disciplines (EMDs) are destined to circularize, adjust, and balance Yin Qi and Yang Qi. EMDs can actively lead practitioners to a simple, natural, and healthy way of life—oneness, or the one—a harmony among all Yin-Yang relations (Sun, 1996). This holistic practice can activate one's maximum potential against disease as well as other negative factors. It has to be achieved through the understanding of such as oneness that is articulated in the Dao theory and practice. EMDs basically originated from observing nature.

Cohn (1993) discovers that physical activity in the East is among the first active steps taken toward the Dao. The physical activity aims

> to make the body healthy, to extend its life span, and to open it up to free flow of Tao. The Tao in its tangible form on earth is cosmic energy or Qi (Chi), a term hard to define and for which 'energy' is no more than a crude approximation. Qi is the vital power of the Tao at work in the world in nature, in society, in the human body. (p. 133)

A Middle East legend tells of a man who was searching, outside his home, for his key that was lost in his home. When asked why he had to do so, the man said that it was lighter outside than within his home. The "key" to health is the body itself. We should not go out for it merely due to the light (scientific reasoning, rationality, pharmacy and surgery in the case of medicine).

Yin-Yang (阴阳) Theory

The Yin-Yang theory is another Eastern ontological philosophy. It interprets the law of the unity of Yin-Yang and elaborates things' origin, development, and disappearance. This theory has played an essential role in unraveling of Eastern understanding of nature and life.

It is said that Yin and Yang concepts as well as the Tai Chi circular diagram were originally designed by Fu Xi about 6000-7000 years ago. The Yin-Yang theory, working with other theories, tremendously influenced almost all aspects of Chinese as well as East Asian politics, economy, military theory, astronomy, geography, engineering, medicine, cooking, dietetics, health, Feng Shui theory, martial arts, and Qi Gong (Martial Art Administrative Center of State Department of Physical Activity, Sport, and Recreation, 1998).

The Yin-Yang theory indicates that Yin and Yang exist in everything in the world. Although Yin and Yang, as philosophical concepts, are not concrete materials, we could, based on the characteristics of Yin and Yang, categorize things in the world into either Yin or Yang. Everything in the world can be described, explained, and further divided into the Yin-Yang characteristics as illustrated by the interdependent dialectics such as black-white, moon-sun, mind-body, stillness-movement, coldness-warmth, inward-outward, downward-upward, backward-forward, closeness-openness, dysfunction-function, earth-heaven, inside-outside, slowness-quickness, and female-male.

Furthermore, the classification of the Yin-Yang theory is relative rather than absolute. There is Yin in Yang and Yang in Yin. For example, the female is type of Yin.

Yet, her surface (skin) and upper body are all Yang. The Tai Chi circular diagram precisely illustrates that there are white fish (Yang) and black fish (Yin). There is a white eye (Yang) in the black fish (Yin) and a black eye (Yin) in the white fish (Yang) (see Tai Chi symbol on page 247).

The other thing that should be noticed is that to name anything on the Yang side must be based on its opposite side. For instance, naming "left side" (Yang) is based on "right" (Yin) and "male" (Yang) is based on "female" (Yin), and so on. Otherwise, we may argue that the "left side" as well as the "right side" in a female's body would be both Yin contradictorily. The Yin and Yang as a pair of mutually complementary forces act continuously without cessation. There are four fundamentals in the Yin-Yang theory:

Opposition

The Yin-Yang theory implies that the two opposite sides exist in everything in the world, sun/moon, heaven/earth, fire/water, hot/cold, and male/female, and so forth. They restrain and fight against each other. For example, warmth disperses coolness and coldness reduces hotness to allow things including human body and mind to maintain a relative and dynamic balance. The disruption of the relationship between Yin and Yang results in diseases or death.

Interdependence

Yin and Yang are not only opposite but also interdependent. The interdependence here means that the existence of one side (Yin or Yang) relies on its opposite side. One side could not live alone without its opposite side. There is no Yin if Yang disappears and vice versa. Namely, there will be no "left side" without "right side." This relationship is also called "co-root" in Chinese culture. Yin and Yang are rooted in each other to nourish, assist, and benefit each other. The co-existence of Yin and Yang brings their function into full play.

Growth and Decline

The opposition and interdependence of Yin-Yang constitute the contradictory dynamics of Yin-Yang. There is a continuous, quantitative, and proportional change of the two sides that is characterized as growth and decline or increase and decrease. The main types of alternations are: 1) A (either Yin or Yang) increases while B (either Yang or Yin) decreases (e.g., from winter to summer in terms of the season); 2) A decreases while B increases (e.g., from summer to winter); 3) A increases while B increases (e.g., the growth of children in both Yin and Yang); and 4) A decreases while B decreases (e.g., dying people). It would be normal for the alternation to stay within certain limits. Otherwise, the pathological state of imbalanced Yin-Yang occurs.

Transformation

Yin or Yang will transform oneself into its opposite when the change of Yin and Yang occurs at certain phases under certain conditions. Namely, Yang can transform itself into Yin, and vice versa. The growth and decline of Yin-Yang is a quantitative procedure while their transformation is a qualitative outcome. Yang reaches its limit and gives birth to Yin; Yin reaches its limit and gives birth to Yang. For example, the body temperature of a patient who suffers a severe fever would suddenly drop at certain moment if no treatment was available. As a Chinese saying goes, "A thing will develop in its opposite direction when it reaches the extreme." Therefore, the growth and decline of Yin-Yang serve as the condition and stage of transformation of Yin-Yang whereas the transformation of Yin-Yang is the result of the growth and decline of Yin-Yang. The transformation of Yin-Yang appears at the extreme stage of development in a change.

One of the general misapprehensions that Westerners may encounter is the tendency to identify this Yin-Yang symbol dualistically: Yang is only the opposite of Yin, and vice versa. As long as we separate this "oneness" into two, we will miss the fundamental meaning in Eastern culture. All things have their complementary part. It is only in the human mind and perception that things are separated into opposites per se. The sun is not just the opposite of the moon. They are complementary and interdependent on each other. We cannot survive without either of them. By the same token, a male is the complement of the female. Without the male, how on earth do we know there is female, or vice versa? The "oneness" of Yin-Yang is necessary in life. If a person rides a bicycle, he/she cannot push on both pedals at the same time or not push them at all. He/she has to push one pedal and release the other in order to move forward. Therefore, the movement of going forward requires this "oneness" of pushing and releasing. Pushing then is the result of releasing, and vice versa; each is the cause of the other. Yin and Yang can be considered as two topographic terms used to designate the shady and sunny sides of a tree, same as anything under the sun having two sides. The Yin-Yang theory in ancient Chinese philosophy is employed to explain the law of change in nature and the law of the unity of opposites.

Summary

In the postcolonial era, cultural assimilation needs to be replaced by cultural accommodation in a shared horizon or a "third space." Postmodernists and reconceptualists pave the way for inviting "little narratives" in the context of global inter-civilizational dialogue. Somatic education aligns itself closely with Eastern thought in the combat against body-mind dualism. Eastern philosophy and movement disciplines offer an alternative, comprehensive, and re-oriented way of meaningful thinking in curriculum theorizing and development.

CHAPTER 3: LITERATURE REVIEW

Mens Sana in corpore sano. (A healthy mind in a healthy body.)

(Juvenal)

In my attempt to investigate the research questions, relevant literature was reviewed, analyzed, and synthesized in the areas of cross-cultural studies, contemporary physical education studies, and EMD studies in Western physical education contexts.

Cross-cultural Studies

There has been an on-going dialogue for 3,000 years between "the two ends of the Old World" in which the East and the West have significantly influenced each other. Scholars in Europe have benefited from the humanistic splendor of Chinese civilization more than one hundred years prior to the Western impact on China (Tu, 2000). For Arnold Toynbee, the West's encounter with the East is one of the most significant world events of our time (Clarke, 1997). There has been ambivalence mainly in the stereotyped form of the West's attitude towards the East. On the one hand, it has been a source of ancient wisdom with an alluring mystical color, a culturally rich civilization that is far superior to, and can be used to reflect on the inadequacies of, our own. On the other hand, it is an alien and exotic region of looming threat or evil and impenetrable mystery as in such evocative phrases as 'yellow peril', 'Asian hordes', 'Oriental despotism', long locked in its stagnant past until rudely awakened by the modernizing impact of the West. This contradictory perplexity serves to place the East and the West in a variety of opposing and complementary relationships with each other (Clarke, 1997).

Park (1996) finds that one of the conspicuous features of the worldwide phenomenon has been the interest in the religions of South and East Asia. Today, occidental people everywhere are probing oriental religious thought and in many cases attempting oriental religious disciplines.

> Heidegger in his *Being and Time* shows that the whole history of occidental thought has been busily preoccupied with *Das Seiende* [object], and has let *das Sein* fall into forgetfulness… According to William Barrett, it is reported that Heidegger is reading D. T. Suzuki's work and has said to a friend that if he understands Suzuki correctly, this is what he has been trying to say in all his writing. (p. 135)

Remarking on dualism, Park (1996) suggests that the meaning of non-duality cannot be acquired by objective analysis or by hermeneutical procedures alone, but only by the existential encounter with non-duality as a living reality and with living teachers such as sages and masters. He indicates that the inwardness and oneness of oriental spirituality must be penetrated in order to fully apprehend the meaning of non-duality and its implications.

One of the most notable Confucianism scholars in the West, Tu (2000) identifies that the modern Western dichotomous worldview (spirit/matter, mind/body, physical/mental, sacred/profane, creator/creature, God/man, subject/object) is discernibly opposed to the Eastern holistic vein of thinking. The general life pattern in East Asia involves consensus formation based on values significantly different from the modern

Western emphasis on contractual relationships. East Asian modernity, centering on its perseverant traditions, demonstrates that modernization is not, in essence, Westernization or Americanization. It also implies the necessity for the West to transfigure itself into a learning, as well as a teaching, civilization. "What East Asian modernity signifies is pluralism rather than alternative monism, which deserves our special attention" (p. 207). The co-existent landscape, especially in East Asia, of contrasting religions (Confucianism, Buddhism, Daoism, Christianity, and Muslim) also asks for our contemplation. Tu (2000) implies that "precisely because an overwhelming majority of cases of local knowledge that are globally significant are Western (Western European and North American) in origin, the phenomenon of East Asian modernity is particularly intriguing" (p. 218). Needham (1969) also remarks that "Chinese civilization has the overpowering beauty of the wholly other, and only the wholly other can inspire the deepest love and the profoundest desire to learn" (p. 176).

However, as Clarke (1997) observes, many academics tend to remain a persistent insularity and continue to feel a certain embarrassment about the study of the East. Not only have histories of philosophy excluded Eastern thought, but also the role of Eastern thought within the broad Western intellectual tradition has largely been ignored in historians' work. There are worldwide interests in the West and "many educationists have acknowledged the importance of a global outlook, but our school and university curricula have often been slow to respond in practice" (p. 15).

MacPherson (2001), a Western Buddhist and a scholar in cross-cultural studies, states that modernity is a cultural expression since the Western Enlightenment and is characterized as a rapid acceleration of change directed by the assumption that such change is progressive, under which is responsible for the vast loss of world language and culture. Nettle and Romaine's (2000) study indicates that in the next 100 years we may lose 90% of the languages of the world unless Western culture opens itself to genuine inter-civilization dialogue and intercultural exchange. MacPherson (2001) also observes

> There has been a dominant form of education exported to the developing world, first through colonial and now neo-colonial, global development initiatives. Meanwhile, Western scholars, educators and policy makers continue to remain ignorant of the diversity of functioning education systems in the world, whereby education has become increasingly equated with this particular Western lineage with its distinctive disciplinary organization, literacy practices, teacher-student relations, student-student relations, and critical approaches. (p. 8)

She contends that this problem partially derives from the arrogance and superiority instilled in the West from its dominant position in former colonial and now global milieus. This has reinforced an equally insidious obstacle to learning from other education systems that are based on the Western paradigm.

One of the most influential cross-cultural intellectuals in curriculum studies, Smith (1999a), argues that the Western culture is or has been stuck within its own cultural self-enclosure and is currently at a type of intellectual and cultural impasse and a state of exhaustion, primarily because of perplexing notions of identity. He points out that everything is in mutual relation to everything else. He affirms that

> the identity "West" can no longer be accepted as a pure thing, because it depends on a refusal to recognize and honor its own dependencies. Since

> the Renaissance, Western ascendance in the geopolitical sphere, … depended upon the subjugation, enslavement, and even obliteration of Others, others now claiming their place within the new configurations of world order. (p. 13)

He continues,

> Today, then, the Western Subject has been "decentered," to use the term of Michel Foucault. In the field of education, and especially curriculum studies, the de-centering of the West has meant widespread reevaluation of the central canons and *oeuvres* that have defined school and university programs to this point, with bringing forward of what has been systematically excluded in the "standard" works of the tradition as taught. Where are the voices of women, blacks, aboriginals and the colonized in the triumphalist male, white European imperial tales? This has been a guiding question in curricular discussions for the last 15 years or so. (p. 13-14)

Instead of demeaning other different cultures in order to affirm only one type (Self) as the "real" thing, Smith (1999a) suggests that we should embrace the other, to see them as one, instead banishing the other as stranger or enemy. "Only through an abandonment of that desire…may it be possible to enter the broader ocean of wisdom that can enlighten our lived burdens as parents, teachers, colleagues, friends, and especially enemies" (p. 11). He also suggests that meditation can lead us to a healthy abandonment of the concepts of Self and Other, and Asian wisdom can assist us to understand "harmony" between nature and human as well as among human beings.

In fact, as early as in 1961, Merton claims,

> It is no longer sufficient merely to go back over the Christian and European cultural traditions. The horizons of the world are no longer confined to Europe and America. We have to gain new perspectives, and on this our spiritual and even our physical survival depends. (Clarke, 1997, p. 15)

Smith (2001) asserts that the leading Western contemporary intellectual work is informed by the deep insights of Asian wisdom and many scholars in the East are also showing deep interests in various Western thoughts. "Traditions always open on to other traditions, so that in any particular moment there are always three traditions at work: yours, mine, and the tradition that we together now are. This is what Homi Bhabha called The Third Space" (p. 3).

Issues in Contemporary Physical Education

A century ago, many prominent leaders including theologians, social reformers, educators, psychologists, and biologists believed that physical education, as a "new profession," might become an important area of study in the 20th Century (Park, 1989).

During its formative years, the physical education curriculum often included pedagogical, medical, and military content (Thomas, 1992). By the 1930s, the focus had shifted primarily to the pedagogical. The accepted goal of physical education was, by then, generally expressed as "education of and through the physical," provided to youth in an institutional setting (Ross, 1986). By the 1960s, the educational model gave way, in many institutions of higher education, to an academic discipline model that currently dominates the curriculum (e.g., science-based kinesiology and quantitative-orientation measurement/evaluation). The shift from practice to theory in higher education leaves the physical education profession in chaos in schools at a time when societal interest in physical activity is at an all-time high (Newell, 1990).

Since the 1980s, critics have charged that leaders in physical education focus on the intellectual aspects of the field at the expense of practical application (Bressen, 1982; Ellis, 1988; Hoffman, 1985; Newell, 1990; Siedentop, 1990; Thomas, 1992). Corbin (1991) questioned the value of a physical education curriculum model that places academic discipline over practical preparation. He contends,

> In the last 2 decades, universities have adapted a "top-down" model that emanated in the sciences. 'Our people' in these universities have committed to this model rather than to the goal of our field. Some…actually believe that if we act like scientists do, then we will be embraced as equal partners by those in other sciences such as physics and chemistry. (p. 227)

Edlin and Golanty (1988) state that "health comes from the harmonious integration of body, mind, and spirit" (p. 126). The World Health Organization has defined health as "a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity" (Russell, 1975, p. 126). Yet, such unity appears difficult to cultivate in an educational environment where "research and analysis have tended to focus on only a portion of the person/event and thus neglect the complexity of the situation, environment, or individual" (Lidstone & Feingold, 1991, p. 241).

Kretchmar (1990) suggests that ignorance dominates the physical education landscape because "we are given little historical, socio-cultural, and linguistic context against which to understand our problems and identify potential solutions" (p. 331). Since the early 1960s, many university physical education programs have attempted to align their curricula with respected scientific disciplines such as medicine, physics, chemistry, biology, and psychology. There is a trickle-down effect in school physical education. For example, the tragic cost for physical education's inability affect significantly the fitness of today's youth and adults. Current literature continues to debate the problems of specialization, fragmentation, and irrelevance in physical education programs in higher education.

Wright (2001) identifies our educational system as failing to develop all of the dimensions (body, mind, and spirit) equally. In modern Western society, "we tend to isolate and separate the different aspects of our humanity. Too often, we treat the mind and body as completely separate entities. In our school system, we overemphasize certain cognitive processes while neglecting others" (p. 5). Physical education literature has primarily focused on the concept of the body as an object. Gerber (1973) remarks that "physical educators have treated the body as an object to be trained, trimmed, studied in a laboratory…When physical educators became satisfied with the idea of unity of mind and body, they ceased to speculate about it in any meaningful way" (p. 128).

Yet, some physical educators have addressed the topic of soma, the body as a subjective phenomenon, synonymous with the person. Eleanor Metheny (1954) was among the first intellectuals to focus on the importance of the subjective bodily being in the development of personal significance and meaning through human movement. She asserts, "Bodies, not games are our business. The starting point for the use of movement as a means of education is to make the body free to act," (Metheny, 1954, p. 28) if physical educators could do this, "we shall find that it expands our realization of our educational potential" (p. 28).

A particular method, incorporating some of somatic education, has been developed by Timothy Gallwey (1974). He calls this method the "inner game way of learning" and has applied it to the teaching of tennis as demonstrated in Table 2 (see page 240). He described the purpose of the Inner Game as follows:

> To explore the limitless potential of and within the human body is the quest of the inner game…the player of the inner game comes to value the art of relaxed concentration; he/she discovers a true basis for self-confidence; and he/she learns that the secret of winning any game lies in not trying too hard. They aim at the kind of spontaneous performance which occurs only when the mind is calm and seems at one with the body. (p. 13)

Precisely, it is the concept of the body as an object separate from the self that must be changed in order to bring a new physical education approach into being. Jesse Feiring Williams is credited with coining the term physical education as education *through* the physical. The phrase "education *through* the physical" indicates a particular curriculum orientation. Williams (1930) rejects the dualistic nature of existence and advocates the view of each individual as a unity of body and mind. As opposed to a more restrictive "education *of* the physical," "education *through* the physical" implies that physical education curriculum can contribute to the total education of the person. In so doing, the physical trainer becomes the physical educator. Coville (1983) finds that EMDs "are excellent examples almost a strictly of 'education *through* the physical' progression" (p. 7). Moreover, physical education has begun to borrow from the method and content of the Eastern disciplines that have underlined the study of consciousness and have aimed for the positive realization of human body's capacities for sensory experience (North, 1977).

EMD Studies in the West

Yang (1996) discovers martial arts have long been an important form of physical activity and education in Eastern Asian countries. This Eastern form of physical activity was recognized as early as the 18th century by Westerners as a foreign, but interesting human movement culture. EMDs were initially introduced to North America around 1900s, but they were not accessible to ordinary people until the 1960s. However, as the result of the popularization of the activity in the 1970s and 1980s, EMDs are no longer foreign and extraordinary but ubiquitous and common in North American society. New generations are growing up with the images and jargons of EMDs. It is not difficult at all to find some type of EMD schools or classes around neighborhoods, community centers, and college/university activity programs. EMDs "have been rapidly globalized" (Yang, 1996, p. 16) and have "become an integrated part of Western mainstream culture, in particular, of sport and physical culture" (for example, equipment, magazines, clothing, shoes, decorations, and movies) (p. 1). There is a new trend to promote EMDs as a type of activity for the general population and there are an increasing number of EMD schools around residential neighborhoods.

Yang (1996) also points out that EMDs have played a significant role in transmitting Eastern forms of physical culture to the Western world. Norton (1986) explained that the Eastern influence in Western sports today came largely from martial arts. Hsu (1986) thinks that the complex character of the Chinese people and the ancient philosophy that underlies the culture are woven into the fabric of traditional EMDs. Thus, learning EMDs can help to bridge the cultural gap between East and West. Herrigel (1989), a German philosopher who went to Japan to learn Zen Buddhism, informs us that it seems difficult for a Westerner to penetrate the Oriental philosophy unless one, like himself, begins by learning one of the Eastern arts.

Yang's (1996) doctoral study, using autobiographical methods, examined the current EMDs in Western society from the perspectives of Western practitioners in comparison to Western literature. His findings indicate that Westerners tend to perceive that Western physical education is "product-oriented" whereas Eastern approach emphasizes the "process." He also discovers that Westerners seem to be fascinated by the idea that education through physical movement can be integrated into the philosophical domain as a result of integrating EMDs into school physical education programs. This perspective is in accordance with Olson and Comfort's (1986) suggestion that EMDs may provide "an excellent alternative supplement to the physical education programs of the West" (p. 101) because EMDs add "a philosophical spiritual dimension with which to build and integrate with the physical dimension" (p. 102). Yang (1996) asserts that the traditional pedagogy of EMDs has never been seriously concerned about less-talented or less enthusiastic students, which particularly deserves physical educators' attention. At the end of his dissertation, he proposes the necessity of reconceptualizing curricular and pedagogical paradigms in EMDs in the Eastern contexts.

When Westerners practice EMDs, they consciously or unconsciously learn or are exposed to Eastern ways of thinking in general and Eastern worldviews intertwined within the discourse of the activities in particular. Although the forms might differ, the underlying intrinsic values, ethics, and virtues are the same for all traditional martial arts (Levine, 1984; Schmidt, 1986). Abernathy (1995) points out that unlike Western sport, EMDs consider technical skills and abilities as a secondary nature and EMDs promote self-mastery rather than merely mastery of others. However, modern EMDs emphasize almost exclusively the Western philosophy of physical competitiveness, with little or no emphasis on Eastern philosophy, meditation, mental discipline, or the character development (Konzak & Klavora, 1980).

Cerny (1981) quotes Urban when she writes that martial arts could be considered "a philosophy based on the belief that a sound mind is achieved through the development of a virtuous character" (p. 49). Schnurnberger (1987) notes that a high code of honor and morality is a large part of martial arts. He cites Andrew Yiannakis, a sport sociologist, who comments that

> There is a recognizable cultural philosophy that is a part of martial arts. It is impossible to be deeply involved in martial arts and not be affected by the philosophy of nonviolence, of respect for your self and your opponent and the emphasis of becoming all you are capable of being. (p. 152)

Kauz (1977) sketches the following philosophical ideas in Eastern martial arts: 1) respect for life and nature, 2) Wu Wei (non-action), 3) moderation and balance, 4) education for training character, 5) filial piety and conformity to the social order, 6) and transcendental spirit and enlightenment.

Back and Kim (1979) conduct a study and verify that being "engaged in martial arts promotes good moral character, promotes nonviolent attitudes and behavior, and leads to enlightenment" (p. 19). Abernathy (1995) comments that ancient Eastern cultures viewed nature as a source of inspiration, or a model of being. Forster (1986) observes that EMDs emphasize "Dao." In Eastern culture, what really matters in life is the way of achieving a goal and not the goal itself. Gallwey (1976) shares a similar thought. As revealed by Becker (1982) and Hyams (1979), most Eastern martial arts end with the suffix "Do" (Dao). Here it refers to the philosophical concept of "Dao" in Eastern martial arts. "Dao" literally in Chinese means path, road, or way. Dao can be understood as a "path" toward enlightenment or finding "truth." It is the path that the martial artist strives to walk. Through this walk, self-actualization, moral ethical, and philosophical values occur.

Brunner (1986) observes that our cultural beliefs shape our experiences, which causes us to place limitations on ourselves. In order to change, it becomes necessary to be open-minded and to change our values. The wholeness of the Eastern concepts and attitudes has begun to catch the attention of Western practitioners. Many of us can catch a glimpse of ourselves in their ideas and practices. He also suggests that a holistic paradigm for physical education must borrow movement forms, images, experiences, and new techniques from the East.

In the introduction to Herrigel's *Zen: In the art of archery,* Suzuki (Herrigel, 1989) suggests that EMDs

> are not intended to for utilitarian purposes only or for pure aesthetic enjoyments, but are meant to train the mind; indeed, to bring it into contact with the ultimate reality…The mind has first to be attuned to be the Unconscious…One has to transcend technique so that the art becomes an 'artless art' growing out of the unconscious. (p. vii)

He points out that what differentiates Zen, a philosophy that influences many EMDs, most characteristically from many others is that it never goes out of our daily life. He cautions that the original unconsciousness is lost and a thought interferes as soon as we reflect, deliberate, and conceptualize. For Orientals these mysterious formulae are clear and familiar truths, but for us occidentals, they are completely bewildering (Herrigel, 1989).

As Forster (1986) states, the interest in Eastern martial arts has recently found its manifestation in the philosophy of sport and in the practice-oriented integration of Far-Eastern exercises into traditional Western sports. Western sports, obsessed with hunting for records and outstanding performances, are fastened on skills, abilities, and physical strength that guide to an artificial separation of body and soul. In EMDs, technical skills and abilities are the means to give stability to the "path." Movement is more enriching and satisfying in martial arts because it is based on a holistic concept that refers to a unity of physical and mental element. Forster also cautions that some of the typical EMDs social structures and religious rituals may not be adopted, but the transition of the martial arts to martial "sport" gives rise to a negative impact. Commercialization paves the way into show business, and the worst result is the brutalization of the martial arts. Full-contact Karate, most popular in the United States, is a perfect example.

The question why many of the EMD instructors do not support the addition of EMDs as Olympic sports is a sample of what could be considered a negative Western influence on the Eastern art. The Eastern martial arts are practiced in the East as a way of attaining enlightenment, self-actualization, health, longevity, and spiritual goals. Combative training is not their sole purpose, as it is many times in the West. In addition, Yang (1996) finds that Americans accept Japanese and Korean EMDs as the main referential framework and neglect other Eastern cultures of EMDs, particularly, Chinese EMDs that have significantly influenced on the former two.

Hanh (1988) also notices that, for some Westerners, to practice EMDs, especially yoga and Qi Gong, is to separate themselves from the world of thoughts and feelings and go to a kind of pure state where the mind contemplates itself and becomes "true mind." This is misleading because mind is not separate from the world of thoughts and feelings. "One is all, all is one" (Hanh, 1988, p. 66). What meditation unfolds is not a concept of truth, but a direct view of truth. When discussing Native American culture, Toelken (1976) cautions that we are simply going to see only what we already know if using our own categories to examine different cultures. He continues, "I would not accuse the white of stupidity, ignorance, or narrow-mindedness. Rather they had not been taught to 'read', to see other kinds of patterning than [sic] their own" (p. 24).

Most urban teachers in North America increasingly face ethnic and language diversity (Fullan, 2001). Physical education must be transformed to meet the challenges arising from apparent socio-cultural changes. Min (1979) states that EMDs

> are a unique learning method serving mankind through mind and body training. It should be obvious that such activity (with all its attendant

> experiences) can contribute significantly to the physical education program. It can provide for those who wish them more harmonizing experiences through the medium of physical movement than are likely to be achieved through participation in the more typical Western competitive games. (p. 97)

Vockell and Kwak (1990) are enthusiastic about bringing EMDs directly into the school curriculum. They state that a very large number of children and youth study EMDs but few physical education teachers know much about this type of activity. Seitz, Olson, Locke, and Quam (1990), quoting Quam's work, state that EMDs "are capable of moving us much closer than sports to personal self-fulfillment, self-actualization, and increased awareness of the social and spiritual responsibilities we have towards ourselves and society" (p. 463). The addition of EMDs into the curriculum would also help develop the total child (Abernathy 1995).

EMDs have attracted attention of Western educators from the first exposure. As early as 1919, John Dewey had an opportunity to observe Judo in Japan that resulted in the introduction of a Judo program at Columbia University (Corcoran & Farkas, 1983). Wright has developed a Holistic Physical Activity model (HPA), based on Hellison's Responsibility model (Personal and Social Responsibility Model—PSRD), through teaching content areas including only EMDs such as yoga and Tai Ji Quan. His dissertation (2001), using the research methods of autobiography and narrative inquiry, discusses the model that he has designed, taught, and evaluated through 1,500 diverse students for six years. Growing evidence supports the physical, psychosocial, and educational benefits of learning EMDs (Abernathy, 1995; Morningstar, 1991; Rubottom, 1972; Wright, 2001), including student grade improvement, decreasing use of drugs, stress management, violence reduction, self-disciplines, and better relations with teachers, parents, and other students.

Brunner (1986) states,

> Eastern concepts and attitudes toward the moving self shape an experience of wholeness that Westerners are beginning to value and to incorporate into their lives. For many of us who shared the Eastern approach of moving with its natural flow of energy and in harmony with the universe, meeting the East meant waking up as we recognized ourselves in the their ideas and their ideas in us. Herein lies the confluence. A wholistic paradigm for physical education must embrace Eastern movement forms which give us new images and new ways of describing our experience as well as new techniques which reveal universal principles of movement. (p. 171)

Kleinman (2003) observes that the battle between holism and dualism among educators is undertaken essentially on intellectual and theoretical grounds and that "we continue to pay lip service to holism" (p. 1). He asserts that the Eastern concept of body-mind unity as achievement through cultivation and practice may be exemplified in almost all of life's activities. "It is especially apparent in the Eastern movement forms, the martial arts, yoga, and dance" (p. 4). He believes that Eastern cultures display an attitude towards the artistic and aesthetic that permeates one's entire life. Therefore, art becomes a part of every thing a human does—life itself becomes art. He claims:

> There is much Western educators can learn from such an approach. It enables us to move beyond the theoretical...Eastern techniques and practices can help us become reacquainted with the other dimension of existence and reality, which are just as important. (2003, p. 4)

Summary

Cross-cultural studies indicate that Western culture is in an intellectual and cultural gridlock because it is bewildered by the perception of identity. In the meantime, many academics in the West tend to remain reluctant to study the East and other non-Western cultures. Physical education literature has also primarily emphasized the body as an object to be studied. The body/mind/spirit holistic view or wholeness in Eastern movement disciplines has caught the attention of many Western physical educators. Embracing EMDs in Western physical education curriculum will not only assist in bringing education *through* the physical movement at a philosophical level but also benefit all students with all abilities in terms of the total healthy human.

CHAPTER 4: RESEARCH METHODOLOGY

Sometimes, we can quiet our mind through moving our body.

(A participant in the present study)

What is Research?

Research is a type of discovery that involves the systematic process of gathering, interpreting, and reporting information. Educational research, therefore, is a systematic and disciplined inquiry applied to educational settings (McMillan, 2004). There are two existing approaches to research, quantitative and qualitative. Historically, qualitative research (naturalistic, inductive, or interpretive research) is relatively new and widely employed in human and social sciences including education, sociology, anthropology, history, political science, business, medicine, nursing, social work, and communication (Lincoln & Denzin, 2003). It has not been consistently conducted in education (McMillan, 2004) or in physical education and sports until the 1980s (Thomas & Nelson, 2001). Although I have practiced both quantitative and qualitative research and have a number of academic papers published, I virtually had no sufficient knowledge and skills of qualitative research until I was immersed within the rich and deep study at the Faculty of Education, University of Alberta, where there has been a tradition of qualitative human inquiry. The program that I am enrolled in at the University of Alberta has fundamentally changed my view of research—a way of appreciating nature, society, human, and the researchers, ourselves. The following section is intended to be both descriptive and reflective of my intellectual journey and my understanding of methodology as it relates to my doctoral research.

My Understanding of Research Gained through Theoretical Discourse

Similar to many other academic domains, there are two traditions in educational research, social sciences (especially psychology and sociology—both of which very often depend upon research principles originated from natural sciences) and human sciences. This characteristic of educational research provides the basis for the very irregular (as well as misleading and inaccurate) division into "quantitative" and "qualitative" approaches, a topic that has been the subject of intense debate among education researchers in recent years (Barrow & Milburn, 1990). Abundant evidence suggests that dividing research and researchers into these two categories describes a state of affairs that virtually exists in academics (Palys, 2003). In contrasting characteristics of qualitative and quantitative research, Thomas and Nelson (2001) and McMillan and Schumacher (1997) provide criteria to assist in understanding both methods (see Table 3 and Table 4 on page 241).

The word "research" is derived from the French "recherche" that means "to travel through or survey" (Charles & Mertler, 2002). Although qualitative research merged in the early 1900s (Denzin & Lincoln, 2003), the enormous majority of studies in education were quantitative in nature. Nowadays, it has become increasingly common to see qualitative works in education (McMillan, 2004) and in physical education and sports (Thomas & Nelson, 2001). Denzin and Lincoln (2003) indicate that the word "qualitative" refers to a focus on the qualities of entities and on processes and meanings that are not experimentally investigated or numerically measured. Qualitative researchers emphasize the socially constructed nature of reality, the intimate relationship between the researcher and the researched, and the contextual restraint that shapes the inquiry. They search for answers to questions that underline "how" social experience is created and given meaning. On the contrary, quantitative research emphasizes the measurement and analysis of causal relationships between variables, not processes. Quantitative researchers believe their work is conducted from within a value-free framework. Researchers from both approaches consider that they know something worth telling to others and employ a variety of means to convey their ideas and findings. These two perspectives significantly differ from each other (Becker, 1986, 1996a; Denzin & Lincoln, 2003).

When being asked, "What is research?" most people refer to the more familiar and traditional quantitative research. In addition, it is disputed that a foremost necessary feature of qualitative approach is its opposition to positivism, the philosophical basis for quantitative approach (Holliday, 2002). Yet, not all researchers think about assumptions and the framework upon which the assumptions have been constructed, and their broader implications (Quinn, 1998). It seems to be problematic, to a certain extent, that positivism, the philosophical root of quantitative research, assumes there is a real and apprehensible "reality" that researchers approach dualistically (Guba & Lincoln, 1994).

Admittedly, natural science has contributed a great deal of understanding in a number of domains. Yet, it tends to treat the world as a giant mechanism, and science and technology play dominant roles as two chief models for understanding "REASON." "To be reasonable" means to be clear/precise, detached/alienating, manipulative/operational, analytical, controlling, explaining, predicative, quantifiable, and objective (Ellis, 1998; Novak, 1978). Dilthey is the first person who differentiates between the natural sciences and human sciences. He asserts that the natural world we can explain, the human world we must understand (Smith, 2002d). Husserl, the founder of modern phenomenological research, argues "objectivity" is impossible because there is always an "I" that perceives the object (Smith, 2002d). William James alleges that human thinking is of essentially two kinds, "reasoning on the one hand and narrative descriptive, contemplative thinking on the other" (Olson, 1992, p. 30). Unfortunately, the majority of conventional human and social scientists, aiming to be "scientific," align themselves with the epistemology of natural science to promote neutral, value-free, and detached observations, and universal generalizations through logical and rational thought that serves to create order out of chaos (Addison, 1989; Quinn, 1998).

It is probably inappropriate to adopt the quantitative approach in all social and human research circumstances, since the ontological and epistemological foundations are different. In modern universities, as Novak (1978) criticizes, there is a decided preference for theories that are "hard," "rigorous," "clear," "quantifiable." Such preferences exert great pressures on what may be considered real, but neglect to clarify the matrix of experiences in which those ideas are rooted. He argues, "In human affairs, one expects a uniqueness in human action that is not reducible to a general law that is the general term in natural sciences" (Novak, 1978, p. 70). Historically, there has been a heavy or excessive emphasis on quantification in science in both "hard" natural science and "soft" social and human science, which eventually marginalizes, excludes, and silences its rival discourses (Guba & Lincoln; 1994, Quinn, 1998). Consequently, the research based on empiricist or rationalist assumptions has been found, in a number of ways, to be inadequate for capturing the meaning of human activity and social structures (Addison, 1989; Guba & Lincoln, 1994). In education, empirical research-based innovations have had relatively little impact on changing conventional school practices (Carson, 1986). In recent years, strong critiques against quantification, under the categories of intra-paradigm and extra-paradigm, have arisen. The new movements in educational research methodology stress meaning, purpose, contextualization, individualized-case orientation, value-ladeness of facts, and the inquirer-inquired interaction (Guba & Lincoln, 1994). "Research focused on discovery, insight, and understanding from the perspectives of those being studies offers the greatest promise of making significant contributions to the knowledge base and practice of education" (Merriam, 1998, p.1). Postmodernism, to a great extent, is one of the major stimuli of this recent research trend.

In borrowing Pinar's (1981) remark on the contrasting schools of curriculum studies, the quantitative and qualitative research methodologies are not exclusive. Each is reliant upon the other. Neither of them has no any point. Both need paradigmatic tolerance in human and social sciences (Smeyers, 2002). Furthermore, there is probably a need for "internal dialectic" to synthesize and nurture a series of perspectives in the area of research as a whole. Quantitative and qualitative perspectives are opposite sides of the same coin, and despite their differences, each perspective might have valid contributions to make to understanding some broader whole (Palys, 2003). Neither quantitative nor qualitative research should be considered superior to the other (King, Keohane, & Verba, 1994). In discussing social psychology, McGuire (1973) employs the yin-yang relation to indicate that the opposite of a great truth might not be a great falsity, but another great truth. The Objective/Subjective binary that defines the debate in quantitative and qualitative traditions is precisely what Eastern philosophy seeks to transcend: life is always both/and, rather than either/or.

In fact, similarities between the two modes of research are more significant than the differences because both groups are in search of the same thing: an understanding of how society works (Becker, 1996b). Best and Kahn (2003) also suggest that quantitative and qualitative research "be considered as a continuum rather than a mutually exclusive dichotomy…some research studies need to include both qualitative and quantitative methods in the same study" (p. 260). It would be beneficial to see the two terms at two levels of discourse: 1) both methods refer to the distinctiveness about the nature of knowledge—how one understands the world and the ultimate goal of the research; and 2) the two terms refer to research methods—how data is collected and analyzed (McMillan & Schumacher, 1997).

Palys (2003) suggests that all social and human sciences benefit if both groups of researchers tolerate and view the others as collaborators rather than opponents. He also observes that there are growing researchers that acknowledge the advantages of incorporating both types of data into any piece of research,

> thereby, more fully exploiting the strengths and overcoming the limitations of each. The challenge then involves trying to explain all the data in a theoretically meaningful way, rather than simply ignoring some of them because of some quasi-religious empirical allegiance. (p. 22)

Thomas (2003), in his recent book, *Blending qualitative and quantitative research methods in theses and dissertations,* shares similar findings: "Most authors today apparently see qualitative and quantitative approaches as complementary rather than antagonistic" (p. 6). He encourages graduate students to learn and apply both methods in their research. He believes that each research method is appropriate for answering certain kinds of research questions but not suitable for responding to other kinds. Moreover, best answers frequently rise from using a mixed method. He regards the debate between the two methods as the demise of a controversy. Glesne and Peshkin (1992) also notice that differences between the two methodological camps do not necessarily indicate that positivists never use interviews or that the interpretivists never use a survey. King, Keohane, and Verba (1994) state that most research does not fit clearly into only one category—qualitative or quantitative. The best research often conjoins features of each. "In the same research project, some data may be collected that is amenable to statistical analysis, while other equally significant information is not" (p. 5). They suggest that we should not regard quantitative research to be any more scientific than qualitative research.

Flick (2002) uncovers that the combination of both research approaches has crystallized as a perspective, which is discussed and practiced in various forms such as epistemology, methodology, research designs, research methods, linking findings, and generalization of findings. Nowadays, many scholars (Best & Kahn, 2003; Creswell, 2003; McMillan, 2004; Patton, 1990; Tashakkori & Teddlie, 2003) advocate a similar view of mixed (qualitative-quantitative) research designs in human and social sciences. Educational researchers have become increasingly interested in combining these two approaches (Gay & Airasian, 2003). The advantages in using a mixed-method design are to 1) allow the researcher to benefit from the strengths of different approaches, 2) provide a more comprehensive depiction of the phenomenon under study, and 3) empower the researcher not to limit data gathering and analysis to one type. Yet, applying a mixed-method design requires that the researcher have expertise or competencies in both quantitative and qualitative methods. In addition, Gay and Airasian (2003), McMillan (2004), and Miles and Huberman (1994) outline specific types of designs for integrating both approaches in a single research project. Creswell (2002) also identifies seven steps in conducting a mixed-method study: 1) determine the feasibility of doing a mixed-method study, 2) determine the rationale, 3) determine a data collection strategy and design, 4) determine research questions, 5) collect data, 6) analyze the data, and 7) write the report.

I employed quantitative and qualitative mixed research methods in the present study. In so doing, I was able to: 1) deepen my understanding of both methods, 2) obtain data from multiple sources, 3) take advantages of the strengths and acknowledge limitations of both methods, 4) disseminate the research results to a wide range of readers, 5) demonstrate the harmony between the different methods, and 6) prepare myself for future professional performance (reading literature, supervising students, and conducting research utilizing both methods).

My Understanding of Research Gained through the Pilot Study

I did not come to a rich understanding of qualitative and quantitative-qualitative mixed research methodology until I actually applied it. In the case of the pilot study in my doctoral research, I employed a qualitative approach and a small portion of quantitative investigation (questionnaire survey) that was consistent with many qualitative researchers who inherently apply multi-methods including statistics (Denzin & Lincoln, 2003; Flick, 2002). My pilot study was situated in a natural teaching activity. It involved sixteen physical education minors in the course of IPT-PE (titled "Introductory Professional Term of Curriculum and Teaching for Secondary School Physical Education Minors"), in which I was the course instructor in the fall of 2002. Through the assigned journal writing, an authentic invitation (non-judgmental marking) was extended to the participants: "I would like to learn about you and your experience because of what you-as-you reveals about human beings-as-human while I would also like you to know me" (Weber, 1986, p. 66). Therefore, understanding occurred when the researcher learned directly from students' experience and stories. "Stories" unite a person's actions together in a sequence with his/her past and future and provide us with one's portrait of life. "It is only through seeing specific people acting in specific circumstances that the social meanings of places can be read. Data is useful for examining concepts, but stories are the appropriate tool for understanding people" (Childress, 2000, p. xviii).

Life precedes theory and theories can never be broader than stories. People do not live primarily by principles but by stories (Novak, 1978). In applying qualitative research methodology, I slowly started to appreciate the complexity, power, and beauty of stories. This virtually astonished me. It is interesting to see significant changes in the way that I encountered the students' journals. At first it was unclear to me how to conduct this type of qualitative research. I did not even know how to respond to students' written journals. I just interacted with them as a typical teacher and ordinary reader. When the first time reading and writing responses to students' journals, I thought that it wasted my time since it took me two whole hours. However, during the second time when I read, I was a bit attracted to the students' stories and comments as they assisted me to unmask the students who I was becoming to know during classes. By the third time I collected and read their journals, I did not want to miss any part and learned a great deal about the students as individuals and their experiences. I really enjoyed reading and responding to the students by the fourth time and I came to the conclusion that the interaction with students through journals provided an effective way for a teacher to improve his/her teaching and for a researcher to obtain data in depth.

To narrate is to give an account or tell stories, but it should not be simply considered as a collection of "objective representation" or "cold facts." As a researcher, I have to attune myself to the data that is the outcome of a series of constructions and to acknowledge these in the process of analysis and interpretation. The findings are not the plain descriptions of sense-impressions, but they are dialogical productions resulting from interactions between the researcher and the participants (Polkinghorne, 1995). Therefore, narrative analysis, involving choosing what to include and exclude, what to emphasize, and how to bring order, artistically both reveals and creates the meanings by contextualizing bits and pieces from the complex discourse of written journals (Childress, 2000; Mishler; 1986). I did not seek an accurate or unique correct interpretation, but rather the most adequate one that could be fostered at that time (Ellis, 1998). Clustered stories unify a person's past, present, and future and supply themes and patterns that could be recognized as the wholeness of his/her life. The interpretive framework is generated by looking across the clusters of stories to discern values, concerns, and predispositions that eventually form the certain themes or patterns (Ellis, 1998). I cannot agree more with Boostrom (1994) who says, "It is true that the novice investigator of classroom life can discover what to pay attention to without having to choose from among methodological theories and frameworks" (p. 64).

Novak (1978) states, "To construct an interpretation of human life is to weave a complicated, nuanced, carefully discriminating story" (p. 87). It requires a lot of deliberative reflection and craft in the procedure of my interpretation. These reflective interpretations allow me to re-immerse myself and understand the pre-service teachers' practices at a deeper and richer level, and invite me to build a more comprehensive account of their practices. This circular movement between understanding the students' practices by immersing myself in their culture and providing an interpretation of those practices forms a significant hermeneutic movement (Addison, 1989; Ellis, 1998). Interpretive research is seen as an ongoing, unfolding, and spiral process, where each successive interpretation has the possibility of uncovering or opening up new possibilities. Any theory, model, or narrative account of human activity is always open to modification and refinement (Addison, 1989; Ellis, 1998).

Gadamer states that research is best described as "conversation" (interaction with participants in the written journals, in my case), out of which can be shown what it is we now have in common by virtue of having shared our "horizon" of understanding (Smith, 2002d). Through this shared "horizon" of understanding, my research question has been re-framed or re-shaped from a conventional, dualistic, psychological, conceptualized perspective toward a holistic, reflective, experiential, hermeneutic, contextual, and portrayal orientation.

Husserl indicates that the researcher has to open him/herself to transformation through the research process. "I become a different person than I was before knowing you" (Smith, 2002d, p.1). It is true that my pilot study engaged me in designing the research, planning the procedures, preparing for the journal prompt questions, responding to journals, reflecting on the selected journal, interpreting the data, writing the findings, presenting the interpretive work, and thus transforming my understanding of the participants, my teaching, the nature of research, and my personal and professional self.

Research Design, Methods, and Procedure

Research Design

The purpose of a research design is to ensure that the obtained data enable the researcher to answer the research question as unambiguously as possible (de Vaus, 2001). The research design as a logical structure of an inquiry is different from a research method that functions as a mode of data collection. Different research designs can adopt the same research methods, yet the research method (how the data is collected) is irrelevant to the logic of research design. The present research design includes the following aspects:

A. Interpretive inquiry

This approach involves semi-structured interview and journal writing based on hermeneutic tradition.

B. Experimental inquiry

Quasi-experimental design: It is applied in the two APT-PE ("Advanced Professional Term of Curriculum and Teaching for Secondary School Physical Education Majors") classes, one as an experimental group (pretest—treatment—posttest) and the other as a comparison group (pretest—no treatment—posttest).

Limitations and Delimitations of Quantitative Methodology in the Present Study

Limitations refer to possible shortcomings or influences that either cannot be controlled or are the results of the restrictions imposed by the researcher (Gay & Airasian, 2003; Best & Kahn, 2003). Delimitations are limitations imposed by the researcher in the scope of the study, usually to narrow it for researchability (Charles & Mertler, 2002; Thomas & Nelson, 2001). Every study has its limitations and delimitations.

Limitations.

A. The comparison and experimental groups of student teachers were not randomly selected and assigned in terms of the experimental design. And

B. The questionnaire survey may not well represent the intentions of research question asked.

C. Participants in the experimental group may be exposed to EMDs for a longer period of time in order to get a more accurate assessment from the participants without pre-EMD.

Delimitation.

The participant group, especially the participants, might not be heterogeneous enough because the student teacher group was from the same institution and the physical education teachers/consultant participants were from the same geographic region (the same province of Canada).

Research Methods

Participants and Setting

There were a total of seventy participants (N = 70) in my doctoral research during the school year 2003-2004, including 58 physical education (PE) student teachers (n = 58), and 12 physical education practicing teachers/consultants (n = 12). The participants' profiles were illustrated in Table 5 (see page 242) and the participants' EMD experience in Table 6 (see page 243).

Student teachers (secondary school physical education majors).

Fifty-eight out of 66 physical education majors (APT student teachers) in the Faculty of Education at a large university in western Canada signed the consent form and completed questionnaire survey. Prior to the beginning of the study, the 66 APT students were assigned to two classes (groups), thirty-three in each, by the administration based on the specific time when students enrolled. Ten of the 58 participants engaged in the following interviews. The 58 student teachers' average age was 24.64 (SD = 3.43), 26 females (45%) and 32 males (55%). There were 25 out of 58 participants (43%) who had previous EMD experience, 13 females (52%) and 12 males (48%). The average length of previous EMD experience of the 25 participants was 11.45 months (SD = 16.37).

These student teachers were in their last stage of the teacher education program and they all had student teaching as non-PE minors experiences of a 5-week student teaching period in various subjects other than physical education during the third year of their program in the Faculty of Education at a large university in western Canada. They all met the degree program pre-requisites prior to taking this APT-PE course as student teachers. The APT-PE course consists of a total of 15 credits: a) "Curriculum and teaching in secondary physical education" (a 6-credit theory course), b) "Integrating theory and classroom practice in the Advanced Professional Term (APT)" (a 3-credit theory-practice course that is integrated into the 6-credit theory course as mentioned above), and c) 9-week student teaching practicum in physical education in schools (6 credits).

Teachers and consultants.

There were 12 physical education teachers and consultants from seven school districts in a western province of Canada engaged in the present study. Their average age was 43.25 (SD = 8.45) with 8 females (67%) and 4 males (33%). Their average experience of teaching/consulting physical education was 16.17 years (SD = 6.78). The school levels that the teachers/consultants taught or consulted at were elementary (7 people), middle school (11 people), and high school (9 people). All the 12 physical education teachers and consultants had previous exposure to EMDs of an average of 7.36 months (SD = 17).

Methods

This research was conducted through a combination of quantitative and qualitative approaches with an emphasis on the latter. The methods applied in the current research include:

Questionnaire survey (see samples in Appendices A and B). The researcher constructed the questionnaire that was employed as an instrument in this research. The questionnaire was designed to elicit responses from the participants regarding the specific research questions stated earlier in Chapter 1. Its content validity was established by 10 professionals in the areas of teacher education, physical education pedagogy, and research methodology. The questionnaire was also tested, adjusted, and refined during the pilot study.

A pre- and a post- questionnaire survey were administered during the first and last classes of APT course. The first survey took approximately 15 minutes and the second one 10 minutes to complete. The questionnaires (pre-test) in both comparison and experimental groups were the same, and the questionnaire (pre-test) and questionnaire (post-test) in the comparison group were also the same. This type of quantitative design could ascertain the research findings (whether there would be significance after the experiment). An APT student supervised (collected and sealed the response papers in front of the participant groups) in each class while the researcher was absent after explaining the survey and responding to questions.

Similar pre- and post- questionnaires applied in the experimental APT group were also conducted prior to, and immediate after, the EMD workshop for physical education teachers/consultants.

Interview (10 student teachers and 12 physical education teachers/consultants). A one-on-one semi-structured interview was conducted with 10 physical education student teachers after final grades were assigned in the course. There were four interviewees from the comparison group and six from the experimental group. In doing so, the researcher could both contrast and acquire information in depth. Each interview lasted about 30-45 minutes. All interviewees were purposefully selected based on 1) those questionnaires that were identified as exceptional, for instance, extreme negative or positive responses, 2) participants' indications of particular attitudes in face-to-face talks, and 3) the instructors' congruent opinions of certain participants who would make significant contributions to the present study. The physical education teacher interviewees were primarily selected based on availability due to the difficulty of accessing teacher participants. Yet, these physical education teachers and consultants all had previous contacts with the researcher, which facilitated rapport in order to obtain valid information.

The interview adopted the three layers of questions regarding participants' personal life (layer A), physical education teaching and/or learning (layer B), and opinions and/or experiences of EMDs (layer C—pertaining to specific research questions), which allowed me to reach a holistic understanding of the data obtained from respective participants The interview questions were generated by the researcher with the intention of extending and refining responses obtained from the questionnaire survey. The researcher also consulted with the supervisory committee members and senior qualitative research methodologists when designing the interview questions (See samples of interview questions in ethics in Appendices A and B).

All of the interviews were tape-recorded and later transcribed in order to facilitate data analysis. Written data was validated by giving the data back to the participants and allowing them to have the opportunity to review, adjust, clarify, and verify prior to conducting data analysis. The interviews served as the primary data source for analyzing the participants' responses pertaining to the specific research questions.

Journal keeping (for APT experimental group). Participants were invited to write voluntary journals throughout the APT class period (see samples of prompt questions for daily journal writing in Appendix C). The journal was not collected and used for research until students' final grades were completed. The participants were informed that their journals were not relevant to their grades and could be returned to them at any time during the research. In the case of the research with APT-PE majors, the researcher provided 27 prompt questions, based on the similar prompt questions applied in the pilot study, to facilitate students' journal writing so that students could be motivated and have a clear idea of the journal writing. The 27 prompt questions were designed with the same three layers (see Figure 1 on page 247), nine for each. In each of the 28 APT classes, students could respond to one question (not on examination days) pertaining to layer A, B, or C (see Appendix C for details). In so doing, they would not feel overloaded. Unfortunately, there was only one written journal submitted at the end of the APT course. This inadequate response to my request for the journal may have resulted from the overwhelming workload of the condensed APT course and the pressure of completing major assignments near the end of the course.

Third party observation (for APT experimental groups). Based on the similar strategy that I used during the pilot study, the other APT instructor who taught with me in the experimental group, as an observer, attended each teaching section of EMDs (10-15 minutes) and simply observed the participants' reactions during their learning. The researcher conversed with the observer each time after class and recorded what was observed. This made the research findings more valid in terms of data triangulation. The data from the observer were not used until final grades of the APT course were assigned. Prior to the APT course, the observer signed a "Research Assistant/Transcriber Confidentiality Agreement" (see Appendix A for details) to meet the ethical requirements (e.g., to ensure the confidentiality of the participants).

Ethical Considerations

All researchers in all types of research involving human participants must confront the ethical considerations and moral aspects related to their studies (Best & Kahn, 2003; Charles & Mertler, 2002; Gay & Airasian, 2003). Yet, there are many issues with respect to ethics specifically related to qualitative research (Lincoln & Denzin, 2003).

Ethics are principles that guide the researcher's interactions with the participants to ensure that their rights and interests are best protected (Holliday, 2002). In order to obtain the free and informed consent of the participants, at the first class of the APT course with student teachers and at the beginning of the EMD workshop with teachers/consultants, and prior to interviewing each participant, the researcher explained the purpose of the project and indicated that it was voluntary and would not affect the students' final grades or teachers/consultants' professional career in any way. Participants were informed that their responses to the survey would be coded for confidentiality and were assured anonymity in the reporting of the research (e.g., professional and scholarly presentations, dissertation writing, and journal publications).

In the case of APT, the researcher asked an APT student in each class to volunteer to distribute the consent letters, to supervise as participants signed them, and to collect and seal them in an envelop while the researcher was absent. After all APT students' grades were completed, all responses to the questionnaires and the information from the third party observation were analyzed, students' journals were collected, and interviews were conducted.

Procedures of Data Collection

Palys (2002) refers to "data" as what the researcher sees or hears, and that which is collected, "raw data" as data still in the form in which it was first collected and the "corpus of data" as all the data which can be utilized in the research.

In general, the present research involves three stages of data collection: the first with pre-service physical education (IPT-PE) minors as a pilot study, the second with pre-service physical education (APT-PE) majors, and the third with in-service physical education teachers/consultants (see Figure 2 on page 247).

The Research Ethics Board (REB) of the researcher's university approved the ethical applications for the three stages of research data collection from human beings. In addition, two special ethical applications were also approved by two local school districts to adhere to their additional requirements prior to the third stage of data collection (with teachers and consultants).

Stage 1: Research with IPT participants (the pilot study)

The researcher commenced a preliminary study that functioned as pilot work using a quantitative-qualitative methodology with a class of teacher education (IPT) students at a large university in western Canada. Informed consent was obtained from all participants consistent with the REB standards of the university. Sixteen of the seventeen of IPT students gave permission to allow the researcher to use their questionnaire responses and reflective journals. Only three of them expressed interest in participating in the follow-up interview, one of whom was actually interviewed.

This part of the study involved teaching the students a 10-minute EMD session designed for integration in every class of the "Curriculum and Teaching for Secondary School Physical Education Minors" (IPT-PE) course that I instructed on the university campus in the fall of 2002 (see Appendix D for the outline of EMD session/workshop).

During the pilot study, all four research methods, namely, questionnaire survey, interview, journal writing, and third party observation were tested and refined in order to assure the quality of the research for the next two stages.

Data acquired from the pilot study were partially analyzed and presented in a qualitative research methodology course at the graduate level with the title of *Partial findings from the preliminary study in my doctoral research.* This allowed the researcher to have an opportunity to present the pilot study in a scholarly manner, to interact with fellow graduate students and the senior researcher (the course instructor), and to strengthen and refine the next two stages or major part of the research.

Stage 2: Research with APT participants

Based on the preliminary study of IPT-PE minors, the researcher took the opportunity of being one of the four instructors in one of the two APT-PE classes/groups at the same large university in western Canada. The APT course involved a 3.5-hour daily class between January 6 and February 12, 2003 for a total of 28 days/classes. The researcher also adopted a quantitative-qualitative approach in this stage of study. A quasi-experiment format was arranged for the two classes or groups, one comparison group and one experimental group. The four instructors in the two APT classes, two for each, team-taught the course-based session of APT. I worked with the other instructor who taught the experimental group. The two instructors in each class primarily managed their "home" class, but taught some parts in both classes based on their expertise. The four instructors worked collaboratively to ensure the same course content was covered except the EMD section that the researcher taught in the experimental class only. As explained earlier in the section titled "participant," the APT consisted of two parts: a 6-week course based component and a 9-week practicum (student teaching) portion. The four APT course instructors were only responsible for the course component, whereas the university student-teaching supervisors and school cooperating teachers were responsible for the student-teaching practicum that followed.

During the first class of the course, the researcher went to the two classes/groups in their home classrooms to explain the nature of the research as described in the information letter, answered pertinent questions, and encouraged students to write a journal for the study and for their own reflection based on the prompt questions that the researcher provided. In the meantime, a student acting as the survey supervisor in each class, distributed the consent letters and the (pre-test) questionnaires. After the consent letters and the initial questionnaires were completed, the student supervisor collected and sealed them in two envelopes in front of all the classmates in their home classroom while the researcher was absent. All 66 students were expected to respond to a questionnaire after completing their consent letters during the first class, and another questionnaire during the last class while the researcher was available to answer any possible questions pertinent to the two questionnaires. On the last day of the APT course, after the researcher explained the research and answered related questions, the same student supervisor in each class distributed, collected, and sealed all follow-up questionnaires in front of the class. All participants responded to the questionnaire (post-test) in their same home classrooms.

Then, the researcher taught the first 15-minute EMD section that was embedded in each of the 28 classes in the experimental group. This ongoing daily contact naturally allowed me to interact with the participants in order to gain a holistic understanding of the data obtained. The key EMD learning components were similar to what was taught in IPT class, but more theory and refinement in movement were provided due to sufficient time.

When both groups completed the questionnaire (post-test) survey, the researcher conducted a 45-minutes EMD workshop (Tai Chi and Qi Gong) for the comparison group on the first call back day (the call back day is a day when student teachers get together on university campus to share and discuss about their practicum for further improvement) during their student teaching practicum in the middle of March 2003. In so doing, students in the comparison group would be treated fairly and the researcher could also obtain sufficient information on participants' opinion and experiences of EMDs prior to interviewing the participants in the comparison group.

When students' final grades were officially submitted, the researcher conducted individual semi-structured interviews with 10 students from each of the two classes in order to attain in-depth data, four from the comparison group and six from the experimental group.

There was no required journal writing in the APT course. Yet, they were encouraged to do so and to actively interact with the researcher in terms of their reflection and experiences with EMDs. The three-layer prompt questions for journal writing were obtained from the researcher at their request.

Stage 3: Research with physical education teacher educators, consultants, and teachers

Applying what was learned from the previous two stages, the researcher, assisted by the two physical education consultants in the same large city in western Canada, provided physical education teachers and consultants with a 6-hour EMD workshop (Tai Chi and Qi Gong) in May 2003 in a location that was convenient to most participants. This workshop functioned not only as a part of the present research but also as an integral part of an on-going teacher professional development (PD) program. This allowed participants to engage in a natural and familiar structure of learning. The EMD teaching/learning components were the same as those being employed in the experimental group of student teacher participants (see appendix D for details)

A pre- and post- questionnaire survey was conducted prior to and immediately after the workshop. Following the workshop, I interviewed 12 physical education teachers and consultants in the province in western Canada. This was similar to what I did in the first two stages. Most of these participants were from the EMD workshop mentioned above. Out of the 12 participants, eight physical education teachers/consultants had attended the workshop. The other four physical education teachers, as well as some of those eight teachers/consultants, were exposed to EMD (e.g., Tai Chi, yoga) sessions offered by EMD instructors in respective communities, through professional development (PD) day(s), or in workshops during professional conferences prior to the interview.

Data Analysis

Data analysis is a way of bringing structure and meaning to the data collected. Holliday (2002) refers to data analysis as a process of making sense of by sifting, organizing, cataloguing, selecting, and determining themes or patterns. The data analysis in the quantitative method was relatively unsophisticated and restrictive. In the case of my research, the data (responses to questionnaires) collected in the quasi-experimental (student teacher participants) investigation were analyzed through the operation of a paired *t* test for each response category in respective participant groups.

The challenge to qualitative methods in data analysis is "how to make sense of massive amount of data, reduce the volume of information, identify significant patterns, and construct a framework for communicating the essence of what the data reveal" (Patton, 1990, pp. 371-372). Morse (1994) indicates that analysis do not simply emerge from the data obtained. Rather, it is a process of "making the invisible obvious, of recognizing the significant from the insignificant, of linking seemingly unrelated facts" (p. 25) through an organized manner. McMillan and Schumacher (1997) envision data analysis as the systematic process of selecting, categorizing, comparing, synthesizing, and interpreting to provide explanation of phenomena of interest.

Holliday (2002) describes the process from data collection to text: 1) corpus of raw data (rationalized sections of messy reality), 2) thematic organization of data, and 3) text of data analysis section (extracts from data, incorporated under each thematic heading to form the basis for the argument). He also explains how to arrive at and use themes: 1) look at the overall character of the corpus of data, 2) search for natural divisions in the corpus, 3) determine the character of each division, 4) find headings that suit these divisions, 5) see how far the headings help make further senses of the data, and 6) use the headings to organize writing. Mayring develops a procedure for a qualitative content analysis: 1) defining the material and selecting the interviews or those parts that are relevant to answering the research questions, 2) analyzing the situation of data collection (e.g., How was the material generated? Who was involved? Who was present in the interview?), 3) formally characterizing the material (e.g., How was the material documented?), 4) defining the directions of the analysis for the selected texts and what one actually wants to interpret out of them, and 5) defining analytic units (Flick, 2002). The qualitative data analysis in the present research was influenced by the theories discussed above, particularly by Holliday's and Mayring's works.

In the process of data analysis, I experienced numerous opportunities for deliberative reflections. Unlike quantitative analysis, there are no globally agreed-upon procedures for a qualitative researcher to follow. Therefore, the analysis in qualitative research is heavily dependent on the researcher's personal background, skills, knowledge, and research experience (Best & Kahn, 2003) and "each qualitative analyst must find his or her own process" (Patton, 1990, p. 381). Patton (1990) expresses further that in qualitative research "analysts have an obligation to monitor and report their own analytical procedures and processes as fully and truthfully as possibly" (p, 372).

I used the following four phases to ensure the quality of the data analysis in my work (also see Figure 3 on page 248):

Phase 1: Organizing the data

A. The voluminous data obtained were carefully and systematically organized according to the three types of participants in conjunction with the sources from questionnaires, interviews, student's journal, and the third party observation;

B. All data was read thoroughly; and

C. Interaction with participants occurred to clarify and verify any missing or confusing responses in the data collected.

Phase 2: Transcribing qualitative data

A. First, all responses were transcribed and sorted into the categories that emerged and into a logical order based on the proposed questions in the 116 questionnaires from APT student teachers (participants);

B. Secondly, 14 questionnaires from the teachers/consultants were transcribed using the same strategy above;

C. Thirdly, all 22 interviews in the respective three groups, 10 student teachers and 12 practicing teachers/consultants were transcribed; and

D. The transcribed data, primarily from the interviews, were validated by giving them back to the participants and allowing them to clarify and verify.

Phase 3: Conduct quantitative analysis

A. A multiple paired *t* test was employed to analyze data in the 116 questionnaires obtained from APT groups; and

B. The same type of *t* test as above was repeated to analyze 14 questionnaires from teachers/consultants. Yet, due to the limited sample size, the statistical results were only reported in a series of figures in Chapter 5 and were used to facilitate the interviews and the understanding of the teachers/consultants.

The results from both sources were placed in a format ready to assist the qualitative analysis over the next phase of conducting qualitative analysis.

Phases 4: Conducting qualitative analysis

A. First, the researcher repeatedly read the data. This aligned with Dey's affirmation that "we cannot analyze our data unless we read it" (1993, p. 83). Intensive notes and questions served to initially isolate most striking and key ideas of the data during reading (LeCompete, Preissle, & Tesch, 1993).

B. Secondly, the researcher carried out a narrative analysis to uncover the individual's response that spoke to and resonated in the holistic context of the three layers' of questions (see Appendix C for details).

C. Thirdly, potential categories emerging from the frequent responses in the data shared by groups of participants were revealed and established. The four guidelines for developing categories suggested by Guba and Lincoln (1981) are: (1) the number of people who mention something or the frequency with which something arises in the data, (2) the categories determined by the audience as important, (3) unique categories, and (4) categories that highlight areas of inquiry not otherwise recognized. The categories were homogeneous and all responses in a single category were similar and heterogeneous (Merriam, 1998). These categories formed the groundwork for teasing out potential themes developed from the participants' own language (Kanyi, 1999). In addition, literature reviews and the researcher's own experiences are also rich sources for themes (Ryan & Bernard, 2003).

D. Fourthly, the researcher scrutinized the micro themes or patterns that coherently emerged and pondered the macro themes across groups and the data sources with the assistance of the results from quantitative analysis. Yet, we should bear in mind that themes are abstract and often fuzzy constructs that researchers identify before, during, and after data collection. Also, there are multiple ways to induce themes (Ryan & Bernard, 2003).

Summary

Any research methodology has its strengths and weaknesses. Quantitative and qualitative methodologies should not exclude each other but rely on each other. This is increasingly recognized by a number of academics. In this present study, the quantitative approach consolidated my qualitative inquiry. The pilot study enhanced my understanding of the quantitative-qualitative mixed approach, especially my interpretive inquiry. The participants from both groups of student teachers and practicing teachers allowed me to obtain data primarily through the questionnaire survey and the interview from the two connected practical fields of teacher education in the university and the teaching site in the school. The carefully planned three-stage data collection and four-phase data analysis facilitated the research procedure and built a sound basis for data interpretation and discussion in the following chapter.

CHAPTER 5: FINDINGS

Through nature, we come to contemplate prayer and meditation. We come to God.

(Pope John Paul II)

As indicated in the "Methodology" chapter, the present study employed a quantitative-qualitative research design. Consequently, in this chapter, the research findings will be presented in two correspondent sections, quantitative and qualitative, in which the quantitative results assisted with the analysis of the qualitative findings.

Quantitative Findings

Quantitative Findings from Student Teachers' Responses to Questionnaires

Descriptive and inferential statistics for each response in the questionnaires of the APT experimental and comparison group are presented in Tables 7, 8, 9, 10, and 11 (see pages 243-245). Examination of means and a paired *t* test were conducted in the comparison and the experimental groups respectively. Four items were centered on the statistical analysis: 1) "All physical education majors should learn some EMDs in order to teach in schools;" 2) "All physical education minors should learn some EMDs in order to teach in schools;" 3) "All in-service physical education teachers should learn some EMDs in order to teach in schools;" and 4) "I have confidence in teaching EMDs." Statistical results indicated that all these four items had significant changes across time (Pre and Post) in the experimental group while none of the items tested in the comparison group had any significant change. Furthermore, all four items that were tested in the experimental group without pre-EMD experience had significant changes across time while none of the items tested in the experimental group with pre-EMD experience had significant changes.

Among these four items tested in the experimental group, the score (1 for strongly disagree and 5 for strongly agree between the score 1 and score 5) of the "confidence in teaching EMD" increased the most ($p \cong 0.000$) although the remaining three items increased significantly as well ($p < 0.05$). Similar results occurred in the experimental group without pre-EMD experience, in which the score of the "confidence in teaching EMD" increased the most significantly ($p \cong 0.000$), the score of "Teachers should learn EMD" was the second significant increase ($p < 0.004$), and the remaining two items increased significantly as well ($p < 0.05$). On the contrary, no significant change in any of these four items was found in the comparison group with and without pre-EMD experiences.

A graphical illustration of the items in which significant differences existed across time is shown in Figure 3 (means of four items in the whole experimental group) and Figure 4 (means of four items in the experimental group without pre-EMD experience) (see page 248).

Frequencies of responses to the four items in the experimental group are listed in Figures 5, 6, 7, and 8 (see pages 249-250). Frequency of responses to the four items in the experimental group without pre-EMD are listed Figures 9, 10, 11, and 12 (see pages 251-252). Frequency of responses to the four items in the comparison group was listed in Figures 13, 14, 15, and 16 (see pages 253-254).

Quantitative Findings from Teachers' and Consultants' Responses to Questionnaires

Unfortunately, there were only seven teachers/consultants who completed the pretest and posttest questionnaires prior to and immediate after the EMD workshop. The insufficient number could not allow for adequate inferential statistical analysis. Yet, the descriptive statistics from the 14 responses to the specific research questions (pretest and posttest) may provide comparative information to student teachers' responses. The frequency of the responses to three items is listed in Table 12 (see page 246) and further presented in detail in Figures 17, 18, and 19 (see pages 255-256).

Qualitative Findings

Qualitative inquiry is continuously creative and interpretive. Researchers do not just leave the data collection site with massiveness of empirical materials and then easily write up the findings. Rather, qualitative interpretations are innovative and artistically constructed (Denzin & Lincoln, 2003). In addition, findings in qualitative research are comprehensive, holistic, expansive, and richly descriptive, and usually in the form of the participants' own words (Merriam, 1998). I focused on presenting the findings of how the participants "see things" rather than "do things" (Silverman, 2003). The following qualitative findings resulting from the systematic analysis of the two groups of participants, student teachers and practicing teachers/consultants are presented.

Student Teachers (APT students)

Qualitative Findings from Student Teachers' Responses to Questionnaires

In addition to ranking items on a 5-point Likert scale in the pre- and post-questionnaires, student teachers were invited to indicate brief reasons for their rankings of each item. Although not all student teachers provided reasons under all items, there was sufficient information related to the specific research questions obtained from 688 responses in the 116 questionnaires from both the comparison group and the experimental group. Under each statement (question) below, I analyzed and clustered the student teachers' responses into logical and sequential topics. A condensed and synthesized summary of participants' responses is also illustrated.

Why should student teachers learn EMDs?

There were eight topics that emerged from 130 responses related to this question, including philosophy, culture, variety/diversity, new activities, students' interest, health, non-necessity, and non-supportive of EMDs.

A. Philosophy

There were five responses that related learning EMDs to the topic of philosophy. These responses focused on "body" and "body-mind relationship." Representative examples of this topic are:

- Some of Eastern philosophy is probably good. But I do not know much about it to have a decision.
- Learning EMDs is good for body and mind connection.
- It provides an opportunity to be kinesthetically aware of your body through different means. Teaching EMDs provides more thorough instruction of body movements.

B. Culture

There were 23 responses in relation to the topic of culture, which seemed to be one of the highest frequencies in all topics. In these responses, student teachers identified the multiculturalism in Canada, school multiculturalism, more students from the East, and the need for teaching non-traditional physical activities. Representative examples of this topic are:

- We (Canadians) have a culturally diverse country and we should practice physical activity from all areas of the world. In addition, there is a strong interest in Eastern ways in the West.
- School multiculturalism is very high. Schools now have many students from the East. We need to understand them by teaching and to be able to cater to them in different areas. We need to include sports that they are familiar with [to show them they are accepted].
- Teaching EMDs is a way to introduce different cultures through physical education. Learning EMDs broadens student teachers' horizons and expands their knowledge and ability to give their students a diversity of cultural awareness and experiences.
- We need more than North American experiences of physical activity and need to start teaching more non-traditional physical education.

C. Variety/diversity

There were 21 responses related to the topic of "variety" or "diversity." Student teachers identified the various needs and abilities of school students and the importance of introducing a variety of activities. Representative examples of this topic are:

- Teaching EMDs can help meet students' diverse interests and abilities at all skill levels. The more I know as a student teacher, the better.
- Physical education should include all areas of activity or wellness and expose kids to a variety of activities in which they may find some to enjoy and do for a lifetime (active living).
- Students today are trying different activities and it would be good to let teachers have the ability to teach and let students have more range of activities.

D. New activities

There were 15 responses related to the topic of a new or different form of activity. Student teachers expressed that teaching EMDs provide students with a new way or different form of activity that can interest students and help their learning process and wellness. Representative examples of this topic are:

- It gives students a chance to learn new or different activities that most people never experience. All students deserve the chance to learn a new form of physical education.
- Any novel, new, and different activity can help learning process and interest students.
- It is also an opportunity to bring something new to my student teaching practicum.

E. Students' interest

There were four responses in this cluster. Student teachers recognized that more and more school students are interested in EMDs and some of them actually participated in the activities within their own community. Representative examples of this topic are:

- EMDs are becoming more popular. More and more students are interested in EMDs, some of who already participate in them and really enjoy doing certain EMDs.
- Teaching EMDs allow us to reach those who have an interest in EMDs. I need to be quite trained in the area in order to teach children.

F. Health

There were 12 responses indicating that EMDs bring health benefits for both teachers and students. Representative examples of this topic are:

- School students should know (variety) many ways to experience something healthy and need to balance their lives.
- Each activity in EMDs contains many physical, emotional, and social benefits to teachers and students, for example, to help manage student/teacher stress.

G. Non-necessity

Twenty-five responses in this topic explicitly expressed that teaching/learning EMDs was not necessary but beneficial. Representative examples of this topic are:

- It is not necessary or essential but beneficial, helpful, or useful.
- It should be as necessary as other activities.
- I would support this action but I think that it should not be mandatory or required.
- It should depend on the individual student teacher's philosophy and school students' interest.

H. Non-supportive of EMDs

There were 10 responses that implied the opposition of teaching/learning EMDs due to the time constraint, non-mainstream characteristics of EMDs, availability of Western activities, the ignorance of EMDs, and the understanding of the physical education curriculum. Representative examples of this topic are:

- Unfortunately, there is not enough time to learn all activities for student teachers.
- EMDs are not very common among the general public.
- Many North American activities can have the same body/mind health benefits as EMDs have.
- I do not know any EMDs and I believe that I can do my job well without EMDs.
- It is not part of the curriculum.

Why should physical education teachers learn EMDs?

There were seven topics arising from 78 responses, including philosophy, culture, variety/diversity, teachers/teaching, health, non-necessity, and non-supportive of EMDs.

A. Philosophy

There were two responses that related learning EMDs to the topic of philosophy. These responses indicated philosophy in general and "body-mind" relationship. Representative examples of this topic are:

- Some of the philosophy is probably good. But I do not know much about it to make a decision.
- In order to teach physical education, teachers should know how the body and mind work together.

B. Culture

There were seven responses that referred to the topic of culture. These responses were related to the global awareness, experiencing diverse cultures, and understanding Eastern culture. Representative examples of this topic are:

- Learning EMDs help increase global awareness.
- It expands physical education teachers' knowledge and ability to give their students a diversity of cultural experiences.
- Learning EMDs helps understand Eastern culture and students from the East.

C. Variety/diversity

There were 10 responses related to the topic of variety or diversity. Student teachers identified the nature of EMDs, the various interests of school students and the importance of introducing a variety of activities. Representative examples of this topic are:

- EMDs provide a variety of lessons and physical activity opportunities.
- Teaching EMDs can help meet students' diverse interests.
- It is important to expose students to and get students interested in alternative or different physical education activities.
- Change is a good thing. It never hurts to try something new.
- It does not hurt. The school physical education curriculum is going toward preparing students for lifelong fitness. EMDs are individual and can be done for lifetime.

D. Teachers or teaching

There were 18 responses related to the topic of teachers or teaching. Student teachers expressed that learning EMDs benefits all types of teaching (not just in physical education) and teachers should update their knowledge as part of professional development and introduce EMDs to students and staff. Representative examples of this topic are:

- Anyone can integrate EMDs into their lesson and gain benefits.
- Many physical education teachers need to keep themselves "up-to-date" and learn a variety of activity, including EMDs, because students really enjoy and do some of the activities for a lifetime.

E. Health

There were four responses indicating that EMDs bring health benefits for both teachers and students. Representative examples of this topic are:

- Because EMDs have good health benefits to teaches and students.
- EMDs are beneficial to anyone and there is no harm when exposing as many people as possible to EMDs.

F. Non-necessity

Fourteen responses in this topic explicitly expressed that teaching/learning EMDs was not necessary but beneficial. Representative examples of this topic are:

- It is not necessary or essential but beneficial, helpful, or useful. It would be nice bonus or a great asset.

- It should be as necessary as other activities.

G. Non-supportive of EMDs

There were 11 responses that were non-supportive of teaching/learning EMDs due to time constraints, non-mainstream characteristics of EMDs, availability of Western activities, ignorance of EMDs, and the understanding of the physical education curriculum. Representative examples of this topic are:

- There is not enough time to learn all activities for teachers. There is too much to ask in-service teachers. They should not have to learn about everything
- EMDs are not very common among the general public.
- Many North American activities can have the same body/mind health benefits as EMDs have.
- I do not know any EMDs and I believe that I can do my job well without EMDs.
- It is not part of the curriculum.
- Teaching EMDs should not be part of their responsibility, only if the school offers EMDs or it is part of the curriculum. Individual choice must take precedent.

What benefits have you already gained through learning EMDs? And what other benefits might you see in the future?

There were four topics out of 63 responses that were identified in relation to this question, including philosophy, culture, teaching/learning, and specific benefits.

A. Philosophy

There were seven responses that related learning EMDs to the topic of philosophy in general, life philosophy, and the body-mind relationship. Representative examples of this topic are:

- I have learned some great life philosophies with "real life" applications.
- Learning EMDs helps me link body and mind, and connect with spirituality. In the future, these connections will grow stronger as one realizes his/her connection to the earth.
- Better understanding of teaching about philosophy through movement.

B. Culture

There were six responses that referred to the topic of culture. These responses were related to the understanding Eastern culture. Representative examples of this topic are:

- I have gained the insight, appreciation, and practice of Eastern culture and movement arts.
- I have gained a good knowledge based on EMDs and it will prove very effective for me in the future endeavor.

C. Teaching/learning

There were five responses that expressed the teaching and learning benefits from learning EMDs. Representative examples of this topic are:

- I have reached a better understanding of teaching about self-concept and through movement.

- Learning EMDs gives me something to add into physical education classes and some students will appreciate EMDs.
- It is difficult to perfect EMDs, therefore always requires practicing and refinement. I have a stronger commitment to practice.

D. Specific benefits

There were 45 responses that indicated a number of specific benefits, including health and healing, kinesthetic awareness, relaxation/calmness, focus/concentration, performing new refined movements with confidence, and application in other activities. Representative examples of this topic are:

- I have improved my kinesthetic awareness, body control, fitness, confidence, and self-control, discipline in the movement.
- Learning EMDs allows me to have a better understanding of health, well-being, and healing.
- EMDs are great ways to release or reduce stress, to relax and clam, to be more focused, to have peace of body and mind, to maintain mental stability or mental health, and to help unwind.
- I have gained new and refined movement.
- I have applied what I learned in EMDs in other non-EMD activities.

How confident do you feel now in terms of teaching EMDs in school?

There were two dichotomous topics appearing from 38 responses, confidence and lack of confidence.

A. Confidence in teaching EMDs

There were 19 responses that indicated confidence in teaching EMDs, especially teaching the basics, although still more theories and detailed skills are in need. Representative examples of this topic are:

- I feel confident to teach the basics or teach exactly what I have been taught. EMDs would be excellent warm-up or cool-down activities.
- I feel confident in teaching EMDs. But I need more understanding of the philosophies, theories, and skills in detail.
- I feel confident because the instruction/instructor was great.

B. Lack of confidence

There were 19 responses that implied a lack of confidence in teaching EMDs resulting from limited knowledge and practice. Representative examples of this topic are:

- I want to know more and need more practice before I feel qualified to teach EMDs.
- I still feel I to know the correct technique well enough to explain.
- I have not learned how to teach.

Why are you willing to learn EMDs?

This question was similar to the one, "Why should student teachers learn EMDs?" but from a more personal perspective. There were six topics involved in this question arising from 58 responses, including philosophy, variety/diversity, new activities, health, personal perspectives, and non-supportive of EMDs.

A. Philosophy

There were three responses that related learning EMDs to the topic of philosophy. These responses were associated with "body" and "body-mind" relationship. Representative examples of this topic are:

- Eastern philosophy has a lot to offer in terms of cultural differences and the opening of minds in the Western world.
- I like Eastern philosophy.
- Learn more the body and mind.

B. Variety/diversity

There were 16 responses related to the topic of variety or diversity. Student teachers identified the importance of expanding knowledge and introducing a variety of activities to school students. Representative examples of this topic are:

- Expand / broaden my horizon, knowledge of different activities for fitness.
- I want to expose students to a wide variety of activities and cultures, especially to provide students with other topics of physical education. Yet, I have very little experience with EMDs.
- I am interested in learning most activities that I can use in class.
- I have the commitment to career-long learning.

C. New activities

There were 14 responses related to the topic of a new or different form of activity. Student teachers expressed their open-mindedness and the motivation of school students.

Representative examples of this topic are:

- I am open to, interested in, and enjoy learning new things (activities)
- It is new and is one way to teach students who are not into team activities.
- It would be "cool" thing to add an interesting element to a class.

D. Health

There were seven responses indicating that EMDs bring teachers personal health benefits and students health benefits as well. Representative examples of this topic are:

- It benefits my own health and teaching practices.
- Learning EMDs would benefit students if students enjoy doing EMDs. Then, I could be willing to learn more about EMDs. I am also sure that I could benefit by teaching EMDs.

E. Personal perspectives

Fourteen responses implied that learning EMDs resulted from personal interest and enjoyment. Representative examples of this topic are:

- Learning EMDs would be interesting, fun, enjoyable, and expanding my personal knowledge.
- I am interested in EMDs and would like to see if it would benefit me.
- I do not know anything about it and I like to be very familiar about the sports [activities] that I am going to teach.

F. Non-supportive of EMDs

There were 4 responses that implied an opposition to learning EMDs due to time constraints and an ignorance of EMDs. Representative examples of this topic are:

- Time is a huge factor and I do not have time to learn it.
- I have other interests do not have much interest in EMDs. But that may be due to my ignorance.

What benefits for schools and students would you expect if having EMDs in school physical education?

There were eight topics related to this question surfacing from 149 responses, including philosophy, culture, variety/diversity, new activities, students' interest, health, instructors' qualification, non-necessity, and non-supportive of EMDs.

A. Philosophy

There were three responses that related learning EMDs to the topic of philosophy. These responses focused on the "body-mind" relationship. Representative examples of this topic are:

- Having EMDs in school can help students understand the link between their body and mind, and learn how their body and mind work together.
- It provides the activities that can develop the mind, rather than just physical activity.

B. Culture

There were 22 responses in relation to the topic of culture. In these responses, student teachers identified the importance of cross-cultural understanding and the need for teaching non-traditional physical activities. Representative examples of this topic are:

- Students would have a broader sense, knowledge, experience, and appreciation of different cultures and physical/spiritual movements beyond North American cultural norm.
- It would increase cross-cultural awareness, understanding, exposure, and acceptance, and benefits.

C. Variety/diversity

There were 18 responses related to the topic of variety or diversity. Student teachers identified the importance of expanding knowledge and experiencing a variety of activities to school students. Despite the large number of responses, there were only two that touched upon the physical education curriculum in terms of the range of activities. Representative examples of this topic are:

- Having EMDs can expand students' horizons, broaden their experience, expand interests, expose themselves to different forms of activities, and let them appreciate a variety of physical activity.
- EMDs provide a discipline that is not normally seen in other sports. EMDs also provide for different benefits and a more balanced view or outlook.
- Teaching EMDs can expand the range of activity opportunities that can be offered to meet outcomes in the curriculum.
- It helps teach the five physical activity dimensions/categories in the provincial physical education curriculum.

D. New activities

There were 6 responses related to the topic of a new or different form of activity. Student teachers expressed that EMDs offer school students a new way or different form of activities that can interest them. Representative examples of this topic are:

- New novel activities are great for everyone.
- Having EMDs in school provides students with new and different activities that they might wish to continue on with through life.

E. Students

Three responses demonstrated the participants' caring of disadvantaged students in physical education programs in terms of having EMDs in schools. Representative examples of this topic are:

- It lets less-skilled students who are not actively involved in sports to get a chance to become physically active.
- It provides more opportunities for students to be active if they are unsuccessful in other areas of physical activity.
- Maybe students who do not excel at other physical activities will find EMDs better for them.

F. Health

There were 12 responses related to the topic of health, including providing a different way of achieving healthy lifestyle and improving overall well-being. Representative examples of this topic are:

- It provides a different method in reaching a healthy lifestyle, especially when people get old.
- Improve both teachers' and students' overall well-being and health.
- They would be more active without knowing they are exercising.

G. Specific benefits

There were 84 responses that indicated a number of specific benefits, including health and healing, kinesthetic awareness, relaxation/calmness, focus/concentration, performing new refined movements with confidence, and application in other activities. Representative examples of this topic are:

- Gaining physical benefits and mental benefits as well as enhance physical and mental capacity.
- Enhancing personal awareness and self-control, and getting in touch with one's self.
- Increase body awareness, body control, and awareness of body movement.
- Developing physical fitness, including strength, agility, balance, flexibility, and stretching.
- Acquiring conscious breathing.
- Channeling energy and expending students' energy in a healthy way.
- Heightening spirituality and inner strength.
- Developing emotional well-being, self-esteem, confidence, discipline, and respect.
- Attaining relaxation, calmness, releasing stress and anger in a constructive way.
- Having better focus and concentration.
- Learning self-defense or self-protection.

- Increasing achievement in school and more enjoyment in life.

H. Non-supportive of EMDs

There was 1 response that implied an opposition to learning EMDs due to the ignorance of EMDs, which was:

- I do not know very much about it. So, I am very indifferent about the whole thing.

What concerns would you have if having EMDs in school physical education?

There were eight major topics that emerged from 111 responses related to this question, including instructors' qualification, students, parents, religion, violence, safety, curriculum, and time limitations.

A. Qualification

This seemed to be the most significant concern that student teachers had. There were 52 responses related to this topic, including qualification and ignorance. Representative examples of this topic are:

- Physical education teachers lack experience, understanding, training, ability, and knowledge of theory, skills, and techniques.
- Not knowing Eastern culture or philosophy very well or interpreting its cultural significance correctly to students.
- I would forget some skills or movement patterns.
- I know less than students.

B. Students

There were 20 responses associated with school students' motivation and reaction to EMDs. Representative examples of this topic are:

- How to motivate, interest, engage, and keep students focus on EMDs.
- How students would react to it, for example, not serious enough, not respectful, or not buying into EMDs.
- Students may not understand the purpose and the power or strength that they might have.
- Students would fool around and wreck it for the students who enjoy it.

C. Parents

There were three responses related to the topic of parents including parental perceptions and it consequential effect on their children.

- Parents may not accept the program.
- Parental perceptions.
- We could get parents who do not want their children to learn EMDs.

D. Religion

There were four responses tied to the topic of religion due to the people's ignorance. Representative examples of this topic are:

- Some people think EMDs were against their religion belief.
- Others may perceive EMDs as a form of a religion when EMDs are not.

E. Violence

There were six responses that associated learning EMDs with causing violence. Representative examples of this topic are:

- Fighting may break out in EMD class.
- Teaching some of the martial arts might inspire students to use those skills on the playground or outside of school hours for fighting.
- Students may use skills in the wrong way to hurt others, not just for self-defense.

F. Safety

There were nine responses that expressed safety concern.

- Safety.
- Injury potentials.

G. Curriculum

There was only one response touching upon the topic of curriculum.

- How to fit with curriculum.

H. Time limitations

There were three responses that indicated time as a limiting factor. Representative examples of this topic are:

- Time commitment.
- It may take away from teaching more important sports like soccer, gymnastics, dance, etc.

In addition, there were 10 responses (from 10 participants) expressing no concern with having EMDs in schools.

What are the major changes you have felt in the past 5 and half weeks from learning EMDs (e.g., understanding, perceptions, and views of self and future teaching)? There were four topics arising from 30 responses that associated with this question, including philosophy, culture, self, and specific benefits.

A. Philosophy

Five responses indicated the topic of philosophy. Representative examples of this topic are:

- The deep underlying meanings and philosophy behind EMDs truly made me think.
- It has helped me realize that the movement is as important as the philosophy it is based on.
- It helps understand the body-mind relationship and the body-spirit relationship.

B. World and culture

Six responses expressed a new understanding of the world and other cultures. Representative examples of this topic are:

- I have gained a great deal of understanding and perceptions of the world through learning EMDs.
- I understand the art of EMDs and it has opened my eyes about the world around me.
- I have gain greater view and appreciation for the other culture.

C. Self

Seven responses stated the topic of self. Representative examples of this topic are:

- I have had a better understanding, perception, and view of myself.
- I view myself and others more peacefully.
- You (the EMD instructor) have given me many things to think about and reflect upon with views of myself and future teaching. Everything you have shared with the class has been positive and made me more comfortable heading out to start teaching. The stories you shared gave me excellent perceptions on life to keep a hold on.

D. Specific benefits

There were 12 responses in the experimental class that identified some specific benefits as major changes due to learning EMDs. Representative examples of this topic are:

- I feel more focused, relaxed, and clam.
- I appreciate EMDs ability to make one feel strong and confident while at the same time relaxing their body and mind (EX24).
- I can focus the Qi through the body, unclog "stuck" areas, and let energy flow.

Other thoughts or suggestions.

In addition to inviting student teachers to provide their opinions for each open-ended question in he questionnaires, there was also a space for "other thoughts or suggestions," available for them to express ideas freely with respect to the investigation. There were four topics identified out of 31 responses.

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A. Comments from the experimental group

There were 15 comments from participants in the experimental group

- Learning EMDs was a great experience and teaching EMDs is an excellent idea!
- You did a great job. Well done. I had fun. I really enjoyed being in your class. It was an honor and a privilege. I feel improved for knowing you!! Thank you so much.
- I love the theory and stories that were a great benefit to understanding the exercise.
- I feel disappointed that the EMD session is over.

B. Comments from the comparison group

There were four comments expressed in this group. Representative examples are:

- I wish that we had the opportunity to learn and experience EMDs.
- Teaching EMDs is a great suggestion.

C. Suggestions from the experimental group

Six responses (six people) provided suggestions for the EMDs session in the experimental group.

- We should practice more during class, rather than stopping us frequently.
- Videotaping students so that they can review and visually see themselves what they can improve upon.
- Do EMDs in a natural or relaxing setting, for example, open area or outside rather than classroom.
- Teach EMDs as the whole class for two classes (two times), rather than 15 minutes in every class.

D. Responses that do not support EMDs

Three responses expressed non-supportive opinions.

- I do not know very much about it. So, I am very indifferent about the whole thing.
- I regard these activities as sought outside school, same as learning boxing.
- It is still enjoyable. But I do not see myself continuing it on my own.

Qualitative Findings from Interviewing Student Teachers

Outside layer of understanding—Student teachers' life in general.

A. Who were these student teacher interviewees?

There were 10 student teachers that participated in the interview. They had an average age of 24.3 (SD = 3.06), and included five males and five females, four from the comparison group and six from the experimental group.

B. How did they grow up?

They were all Caucasian Canadians. Most of them came from middle class families with siblings in western Canada. Families had a great impact on their growth. Like many physical education majors, as children they were successfully involved in traditional sports and physical activities, both in organized competitions and recreational activities. The youngest one who participated in organized sports was only five years of age.

Prior to their former teaching practicum in university as student teachers in their major and minor areas, they all had previous working experience with various school students, primarily as coaches as well as team managers, summer program leaders, classroom teaching assistants, and volunteers in the "Study Buddy" system to help school students in difficult subjects. The average work experience was 4.88 years (SD = 4.50) with a range of 3 month to 15 years. Some of them started coaching when they were young teenagers. Three of them had cross-cultural traveling experience, one teaching in Japan for a year, the second one traveling through Australia, New Zealand, and south Asia, and the third one travelling around Europe and Australia.

One student teacher's statement exemplified many physical education majors' reflection, "I have had a lot of experience playing sports since I was a kid and will continue to play sports and be active for a long time because of the enjoyment and benefits that I get out of participating."

C. Why did they want to be physical education teachers?

Choosing a teaching career in physical education resulted from their positive and enjoyable involvement of physical activity as athletes and coaches, and their understanding of physical education as university physical education majors. One student teacher asserted,

> I have always found physical activity, sports, health, and wellness to be a major aspect of my life. I understand the benefits and importance of physical education and want others to realize how important it is as well… I want to make physical education class for students to be something they look forward to everyday.

In addition to the impact of their physical education teachers and coaches on their profession selection, they had a strong interest and commitment to promote a healthy and active lifestyle. As a student teacher stated, "Becoming a PE teacher was the route I decided to take to ensure that I had a positive effect on the healthy lifestyles of my students." Another student teacher added, "I want to make a difference in students' lives so that they make the right choices and they find enjoyment and benefits for themselves by being active and healthy." The delight of working with children and youth was also a factor that student teachers implied in terms of their job-orientation. They wanted a job that they loved and they could go to work everyday for the rest of their lives, and teaching physical education allowed this to happen.

Middle layer of understanding—Learning and teaching physical education.

A. How did they like the APT course (*Curriculum and teaching in secondary school physical education*)?

With respect to the APT course (a 3.5-hour daily course for 5.5 weeks), they all felt overwhelmed by the vast amount of material covered in this condensed course. Hands-on or practical topics, for example the professional development workshops, seemed to be their preference. The term "workshop" refers to a part of this university's APT-PE course content in which learning experiences for their colleagues, based on specific dimensions of the secondary school physical education curriculum, occur so that student teachers would feel comfortable about teaching physical education in real school settings in the future. It is a type of peer teaching, in which theoretical and practical teaching insights and strategies that would be used in physical education classes in future teaching are presented. They deemed that the more tools in their teaching toolbox, the better prepared they would be for teaching. This technical perspective contrasted with their opinions towards the seemingly repetitive nature of the theoretical content that they believed had been taught in other courses (e.g., classroom management and assessment). Yet, they admitted that this course prepared them for their practicum, especially in terms of how to plan for teaching. They also enjoyed the social aspect in this pre-practicum course. One student expressed,

> I thought that it was really interesting to see all the other students that were with me here knowing that they were going out to do the same thing, learning the curriculum, how to do lesson plan, and what to expect... It was comforting by just knowing and ensuring everyone going out to do the same things, everyone had the same questions and concerns that I had. I think the biggest thing in our APT class was learning, planning, and the preparation because that helped me when I got there. That is the biggest part of what you do during practicum.

B. How did their practicum go in general?

In the practicum immediately after APT course, they all had positive experiences of teaching in secondary schools of varying class sizes, genders and races of students, activities, and socio-economic surroundings. One student teacher commented, "I was totally interested in becoming a teacher during the practicum. I found that I really enjoyed my career choice. That was really a big relief. I had a wide variety of subjects to teach and I had really a good time."

C. What were the joys in teaching physical education?

The joy that they received from teaching physical education was seeing students' enjoyment of physical activities and interacting with students in and outside of classes.

D. What were the challenges in teaching physical education?

For them, the challenge of teaching physical education was assessment, class management, limited support and respect for physical education, working within unstable teaching facilities, and having a wide range of knowledge and versatile abilities that physical education teachers needed. A student teacher's comment especially warrants full attention:

> What strikes me is the wide range of knowledge in physical education and the ability to explain things in many different ways, compared to math and science that usually have one answer for every student. You have to constantly learn new ways to teach the same thing. Furthermore in education, it seems that we always teach students to think using their mind but we forget to teach them how to use their body. It can be a challenge.

Inside layer of understanding—Views directly associated with EMDs.

A. Background information:

There were only three student teachers in this interview group that had experienced EMDs prior to the APT course, one from the experimental group and the other two from the comparison group, for an average of 10.33 months (SD = 11.85). The first time that they were exposed to EMDs was 6.33 years ago (SD = 7.57) on average. Two of them were still practicing on a regular basis. The six student teachers in the experimental group all participated through the EMD section arranged in their class. The four in the controlled group also partook of the one-hour EMD workshop on the practicum callback day one month after the experiment. They all enjoyed the EMDs due to the new and different perspective, cultural experience, body-mind connection, and hands-on learning experience. One of them stated, "I loved EMDs. From Day 1, I really worked on it at home, taught my girlfriend, did with my mom, and demonstrated for people. They think it is the coolest thing. People cannot believe that I can do it." Another student teacher expressed deeper thoughts:

> I think there was no separation between the philosophy of and actual physical nature in EMDs. There was no gap between them. This is what we should learn in our physical education: while we try to cultivate their [students'] body and make them become active people that are healthy, play sports, and do physical activity; at the same time, we should try to relate them to that doing physical activity is not just good for their body but for their mind and spirit.

B. Why were they interested in or accepted EMDs?

Student teachers indicated that they were open-minded and liked to try new things. Cross-cultural experiences, such as traveling, were also a factor to their cultural awareness. The ever-changing society in Canada made them think how they should be prepared for teaching in the multicultural environment. The benefits of learning EMDs were a persuasive motivation for them to embrace EMDs. One student teacher noted, "I think that EMDs are very important for those who want to become physical education teachers because this type of approach comes more than the physical." For the comparison group that did not have the EMD section in their APT course, people expressed their regret for this unfortunate research arrangement because they lacked having one tool in their "bag of tricks" as a teacher and missed a cultural experience that benefited future teaching in multicultural class environments. One of the interesting findings was that the participants expressed that they did not feel religious undertones in EMDs although many participants were Christians.

C. What did EMDs appeal to them?

What appealed to the student teachers was that EMDs offered something that Western society did not sufficiently have, for example, a holistic view, activities with strong heritage and philosophy, obtaining physical and mental health at the same time, activities from which everyone can benefit not only in physical education but also in other subject areas, the great concentration and relaxation level that people could reach, and strong awareness of self and surroundings. One student teacher contrasted East-West:

> They are just fundamentally different in their approaches. I would characterize Western physical activities as more intense, targeted, and specific to what you try to obtain in any particular training session. EMDs seem to be more controlled, deliberate, and holistic in terms of what you try to produce out of it.

D. What surprised them in learning EMDs?

When learning EMDs, student teachers were surprised by the relaxation, focus, personal challenge (e.g., remembering and perfecting the moves, fitness that EMDs promote), rich theory and history, and the non-religious aspect of EMDs. One student teacher profoundly noted:

> I really feel surprised that teaching this way to me is much more meaningful to have a combination of both physical and mental, and there was reflection in myself while we were doing it. In physical education class, there is a lot of noise. Or, if there is no noise outside, there is a lot of noise in our mind where we are thinking a lot of things. But when getting into EMDs, there is only you. You only think about yourself and what you are doing. There is no time for other things.

E. What surprised them in teaching EMDs?

Two of the 10 student teacher interviewees actually taught EMDs and one observed a guest EMD instructor teaching her students EMDs. It was surprising for them to observe improvement in their students with respect to attendance, quietness, and focus, regardless of learning Tai Chi, yoga, or Karate. This also surprised their cooperating teachers who even asked for permission to join the class in learning EMDs. One student teacher stated:

> The students that were least focused in PE were the best to attend to the karate session. Their interest level was outstanding. I was amazed at the level of focus and discipline that the students had. It is an area that I will definitely explore with my class in the future.

He also proudly mentioned that he taught EMDs in the other student teacher's physical education classes because the other student teacher's cooperating teacher wanted the other student teacher to teach EMDs; but the other student teacher had no EMD knowledge.

F. What did EMDs satisfy them?

Of most satisfaction to the student teachers was the theory of EMDs, offering a new perspective that people think, providing different options for presenting a healthy and active life style, changing people's mindset at personal level, supplying another "tool" in the teaching "toolbox," and bringing people into "a zone of comfort" where they can enjoy a time of peace. One student teacher reflected:

> What has been most satisfying is that I found something that I can do and that brought me to different places in my mind where I can think things that I normally do not think about. I know in my life I am pretty hectic (always on the "go") and there are not many quite moments for myself. EMDs allow me to have quiet time to think about myself and where I am and my life right now.

G. What did EMDs disappoint them?

Although most student teachers did not experience disappointment with learning or teaching EMDs, some still indicated that they were not impressed by disrespectful attitudes from a few classmates. One the other hand, one student teacher reported, "What has been most disappointing me is that there is so much to learn and I do not have time to learn it. Looking down the future, I may disappoint myself if I do not continue EMDs."

H. What were the values of integrating EMDs?

Similar to questionnaires responses of student teachers, this group also identified the values of having EMDs in regular school physical education program, for example, to open students' eyes to different things and new cultures, to benefit those lower-skilled and behavior-challenged students, and to allow students to have better self-awareness, focus/concentration, relaxation, discipline, and active lifestyle. One student teacher affirmed:

> If students can learn EMDs, they can become self-aware of themselves…. especially when many our activities emphasize the opposite, competition, or comparing to others, or doing better and better. EMDs teach you there is always a room for improvement…. If we instill a belief in improving ourselves individually, we will be helping those around us and the society as a whole. The better individuals we are, the better we are able to relate to others and help them, which is just fantastic.

I. Did they plan to integrate EMDs into their future physical education programs?

All interviewees conveyed their willingness of integrating EMDs into their future physical education programs, as a form of warm-up, cool-down, transition between activities, or activity units, either on their own or by bringing in experts. One student teacher was excited about integrating EMDs into regular physical education programs, "It can open up tons of new opportunities to your classes and to you. And, your students could also introduce somebody who had great cultural and knowledge backgrounds into the class to teach, which would be fantastic." Another student teacher pointed out that physical education majors had done traditional activities hundreds of times, which was good. Yet, EMDs have tremendous benefits for physical education programs and few students have experienced them. Many of them have never even thought to teach EMDs.

J. What concerns, challenges, and difficulties did they experience or anticipate when integrating EMDs in physical education programs?

Slightly different from the responses in the questionnaires, student teachers were primarily concerned about students' reaction (e.g., ignorance, disrespect, peer pressure, discomfort, and unfamiliarity) as well as EMD teaching qualifications (e.g., lack of training and knowledge). This may have to do with the significant change in confidence in teaching EMDs, which was found in the quantitative analysis. They also indicated that many physical education teachers were reluctant to try new things and make changes. In addition, religion was foreseen to be a possible issue from parental ignorance if not addressing EMDs properly. Yet, none of them seemed to have a concern about violence in EMDs and they argued that many Western activities demonstrated extreme violence in such as football, rugby, hockey, wrestling, even basketball and volleyball. One student teacher scrutinized from psychosocial perspective:

> Unfortunately, there are a lot of assumptions or ignorance towards different cultures, especially in Western countries. Because we are so focusing on ourselves sometimes that we do not open ourselves to different ideas (although open to new ideas)…. People are scare when there is a difference. They do not like to see differences, especially in our culture; I think that we like everyone to be the same.

He went to further into the avenue of education:

> Sometimes, those barriers, that are from parents and just are the way being in children's mind, become too tough to break, specially, in a classroom setting of 20 or 30 students.... Our education itself tries to teach everyone that they are equal—everyone is the same, everyone talks the same, and everyone has the same experiences. I think that it would be difficult for a lot of students if we teach them EMDs that allow everyone to be different, find their own comfort, and do it at their own levels. It is unfortunate that they close themselves off because they do not want to be different.

K. How did they visualize or foresee EMDs in Canadian or Western physical education programs?

When visualizing EMDs in Canadian or Western physical education programs, although some of participants were not sure, most student teachers noted that it would take time because not everyone was open-minded. They saw a necessity to expose new teachers to or train practicing teachers in EMDs. Some of them saw a place for EMDs in school programs because of the new teaching philosophy that advocated offering a wide range of activities and because of the significant augmentation of Asian population in Canada. One of them predicted, "I think physical education is moving further away from competitive sports more to individualized activities. EMDs would be a big 'selling' in the future, especially for the less-skilled kids. That would be a good selling point for physical education."

L. Would they change views or ideas about EMDs in the future?

It would be normal to think that these student teachers' opinions or ideas changed during learning EMDs, especially in the experimental group or that they might change when they became school teachers since they had not gained a full comprehension of school system that they were going to work at. Yet, some of the findings were interesting. For example, all student teachers experienced changes in gaining tremendous respect for EMDs not just because of their personal benefits but also for the possible integration of EMDs into their future teaching. One of them expressed, "Initially, I was skeptical about EMDs in relation to the course. I was not sure whether I would look further into them. And now I do want to learn more. That has been changing what I anticipated."

In terms of future teaching careers, a few of them explicitly affirmed that they were not going to change their perception of EMDs even though there would be unfavorable structure or pressure in schools. One student teacher expressed calmly, "I would not change my views on EMDs at all. I am not saying that I would fight with the school and make students to take it. But, I could incorporate into my class as an option." One pointed out even more insightfully,

> The structures of schools such as policies and administration are not constant and are always in a state of change. This means, as teachers, that we have the ability to influence the structure of education and make it better and more open to new ideas. It is always easy just to go to the old structure. But if you have a strong belief in it, then, you can carry it and do it. You work through the problems and troubles that may occur. Eventually, you will get the structure changed that you want.

M. What suggestions did they have for APT-PE course that integrated with EMDs?

Student teachers expressed their wish that EMDs be integrated into all physical education teacher education (PETE) programs. They were inclined to have EMDs in this teacher preparation (APT) course because they did not have to worry about their marks (i.e., learning EMDs was not part of the grade). In other words, they would be less likely to take a full course of EMDs because they were not willing to risk receiving a lower-than-expected grade. Interestingly, most of them preferred having EMDs for 10-15 minutes in every class as a routine. A student teacher insightfully analyzed:

> The repetition of doing EMDs sequentially over a series of classes allows people to truly develop an appreciation and understanding for what is going on. It is naive to say that you can get the same thing out of doing 10 or 15 minutes basketball, field hockey, or volleyball every day.

N. What were their reactions to the interview?

They liked the format of the semi-structured interview because they could express ideas freely. In fact, some of them appreciated being given the opportunity to talk about what they have experienced. Through interactions, student teachers realized that the researcher had to exert much more remarkable effort and compassion than they had previously thought necessary in conducting research. This is what hermeneutic inquiry entails: a mutual respect and a new understanding of each other while creating new meanings of the researched.

Qualitative Findings from Teachers and Consultants

Qualitative Findings from Teachers' and Consultants' Responses to Questionnaires

There were seven physical education teachers/consultants who participated in the 6-hour condensed EMD workshop. They filled up the pre- and post- questionnaires prior to and immediately after the workshop. The format and questions designed for teachers/consultants were similar to the ones for the student teachers in order to make comparisons and to facilitate data analysis. After ranking each statement (question) in the questionnaires on the 5-point Likert scale, teachers/consultants were also invited to provide brief reasons why they chose certain rankings. Although not all teachers/consultants offered reasons under each ranking that they selected, there was still sufficient information associated with the specific question acquired from a total of 170 responses in the 14 questionnaires from seven physical education teachers/consultants.

Why do they want to learn EMDs?

There were 17 responses to this question from the topics of culture, learning/teaching, and specific benefits.

A. Culture

There were three responses in relation to this topic.

- Learning EMDs allows me to see another cultural perspective.
- EMDs are an alternative movement form that is a total contrast to North American movement.
- EMDs balance Western physical training.

B. Learning/teaching

There were nine responses linked to the topic of learning/teaching, including balancing teaching and learning, learning and teaching new and various things, and the nature of EMDs. Representative examples of this topic are:

- Learning EMDs can balance out my teaching/learning.
- I am always interested in learning new things and willing to teach them to students.
- I am a believer in experiencing a variety of disciplines that can obtain overall health.
- EMDs help us to accomplish more than we thought possible in clam. It also allows achieve interdisciplinary outcomes.
- Both teachers and students can benefit from EMDs that are non-competitive and just for the individual self.

C. Specific benefits

There were five responses associated with the topic of specific benefits, including relaxation and well-being. Representative examples of this topic are:

- Learning EMDs helps relaxation, reduce stress, and slow down our busy lives.
- It assists life balance and obtain heart benefit.

Why or why not should all PE teachers/consultants learn some Eastern movement disciplines in order to teach in schools?

There were 20 responses to this question from topics of philosophy/culture, teaching, and students.

A. Philosophy/culture

Four responses touched upon the topic of philosophy/culture. Representative examples of this topic are:

- Eastern philosophy is powerful. It provides balance in life and body-mind connection.
- EMDs help to complete the whole, not just only "Yin" or "Yang."
- As educators, we should be open-minded to other cultural way of doing things.

B. Teaching

Nine responses were linked with the topic of teaching, including widening views and having more alternatives. Representative examples of this topic are:

- Learning EMDs can broaden perspectives, balance teaching styles and approaches, and gain benefits personally and professionally.
- We should have knowledge in a variety of discipline so that we can expose them to our students.
- It would be a complement to the physical education program to first expose and widen our scope of what is available in the realm of health.
- It provides an alternative or option to people in helping them to stay active and healthy.

C. Students

Seven responses were associated with the topic of students, including increasing students' success and serving all students. Representative examples are:

- Not all students are able to do Western sports successfully and EMDs can make students gradually success at every level.
- EMDs are for everyone and all students could benefit from EMDs. It is perfect for our PE classes that have every possible type of students.
- EMDs have the individualized and non-competitive philosophy. Teachers should learn about them for personal and professional reasons.
- All students have their likes and dislikes in terms of being healthy individuals. Not many of them know much about EMDs.

Why or why not should all student teachers (physical education majors and minors) in universities learn some Eastern movement disciplines in order to teach in schools?

In responses similar to the previous question, there were 16 responses from the topics of philosophy, teaching, and students.

A. Philosophy

There was only one response to this topic with respect to the body-mind relationship.

- Learning EMDs helps understand mind-body connection.

B. Teaching

There were 11 responses to this topic that represented the ideas of open-mindedness and toolbox. Representative examples of this topic are:

- Learning EMDs can allow student teachers to broaden their perspectives and balance teaching styles and approaches. The more tools you have in your toolbox, the better.

- They should experience as much as possibly to take into their repertoire, keep options open, and add to knowledge base.
- All prospective teachers need to experience EMDs as alternative movement forms.
- They should have the opportunity to learn EMDs to be exposed to it in combination with other teaching philosophies and techniques.

C. Students

There were four responses related to this topic, including EMD benefits and nature of EMDs. Representative examples of this topic are:

- All students could benefit from EMDs and therefore, student teachers should learn about them for personal and professional reasons.
- Students need EMDs that have individualized & non-competitive philosophy.
- It is important to do something slowly and alone, and help clam individuals in a society that tends to be "go-go-go."

What personal benefits do they expect or did you get from learning Eastern movement disciplines?

There were 38 responses from this topic in relation to philosophy, culture, new activities, health, and specific benefits.

A. Philosophy

There were four responses related to this topic, for example:

- I enjoyed philosophy and stories in EMDs.
- I like the body-mind connection/balance and body-mind oneness philosophy.

- The whole balance of Yin-Yang and the effects on our body make so much sense.

B. Culture

There were four responses in this topic, for example:

- I have gained the appreciation of Eastern culture and tradition as well as the knowledge and understanding of EMDs.
- I have gained the appreciation for other cultures and physical differences.
- I become more open-minded to other cultures.

C. New knowledge

There were three responses in this topic, for example:

- I become more open mind to new ideas and knowledge.
- I realized that I am not the only person who is interested in this new personal learning & growth.

D. Health

There were four responses related to this topic, including benefits and nature of EMDs. Representative examples of this topic are:

- Learning EMDs helps search holistic or overall health and wellness.
- It can reach improved & stronger heart.
- Learning EMDs can make people to be healthier or stronger physically, mentally, and spiritually.

E. Specific benefits

There were 23 responses related to this topic, including relaxation, focus and peace. Representative examples of this topic are:

- I feel that I am able to slow down my mind, to relax, reduce stress, to focus, and to obtain inner peace through this less stressful form of exercise.
- I feel more comfort with who I am and react more calmly to situations.
- I have been able to do and control the actual movement form, and gained better body control, balance, and flexibility through this personal discipline (the activity by the self and for the self).

What (possible) benefits for their students do you expect from teaching Eastern movement disciplines in school PE programs?

There were 39 responses to this question from topics of philosophy/culture, student, new activity, and specific benefits.

A. Philosophy/culture

There were 10 responses related to this topic, including the body-mind relationship and openness to new culture. Representative examples of this topic are:

- Student can improve mind-body connections.
- Students can open their minds, learn, and appreciate other different cultures, including Eastern culture and tradition.
- They can become more open-minded and experience something that is not part of their "regular" traditional Western exposure (i.e., "The faster and stronger, the better.").

- It may provide an experience or opportunity to be open and to be freer in their perspectives in future situations to try something new and not afraid.

B. Students

There were 5 responses related to this topic, including self and nature of EMDs. Representative examples of this topic are:

- Many students will like EMDs because of their non-competitiveness, Individualization, and uniqueness.
- EMDs allow student do something just for students' own benefits and not just to "beat" somebody.
- EMDs can improve and strengthen student empowerment.

C. New activities

There were 5 responses related to this topic, including the self and nature of EMDs. Representative examples of this topic are:

- Students will have the joy of experiencing a new or novel activity, approach, knowledge, and ideas.
- EMDs provide an alternative movement form for students, especially when they feel ill.

D. Specific benefits

There were 19 responses related to this topic, including self-discipline, relaxation, and control. Representative examples of this topic are:

- I have gained mental & spiritual strengthening, personal discipline, respect for others, self-control, better body control, better body balance, more energy, and being able to think of self as a centre.
- I feel that I am able to slow down my mind, to relax, reduce stress, to clam, and to obtain inner peace through this less stressful form of exercise.
- I have had the appreciation for the disciplined movement that offers inner peace.

What concerns, challenges, and difficulties do they have in teaching Eastern movement disciplines in school physical education?

There were 22 responses associated with this question from topics of teaching, students, religion, and ethnocentrisms.

A. Teaching

There were 13 responses related to this topic including:

- Lack of EMD training among teachers. We should be make sure to understand EMD philosophy, perform correct movements, feel comfort to teach, and have enough knowledge and practice.
- At first I am concerned about my expertise, but now I will not hesitate about teaching EMDs after the EMD workshop.
- I am concerned about remembering the movement and teaching them. I do not want it to be a mechanical process—just going through the movement—but to give a sense of helping the whole self.
- Other supports would be helpful, for example, accessing to videos, materials, books with pictures, and more teaching workshops.

B. Students

There were two responses implying concerns about students.

- Students, especially late junior high ones, lack interests of EMDs.
- Students' perception may not let them to buy in EMDs because EMDs are quite different for most students compared to what they are accustomed to.

C. Religion

There were five responses indicating religious concerns.

- Some people may think that EMDs have religious overtones or religious implications.

D. Ethnocentrism

There was one response that touched upon the topic of ethnocentrism.

E. No concern

There was one response expressing that there was no concern at all.

How do they like EMDs after learning EMDs from this workshop?

There were nine responses related to this question including the nature of EMDs and specific benefits from EMDs.

A. Nature of EMDs

There were six responses associated with the nature of EMDs including the philosophy, simplicity, discipline, uniqueness, and individualization. Representative examples of this topic are:

- I thoroughly enjoyed learning EMDs, especially, their philosophical basis behind the disciplines.
- I like that there is no equipment necessary and that it can be done in a group and/or individually.
- I like the discipline and technique aspect.
- It is very different from any other activity that I do.

B. Specific benefits

There were three responses linked to the topic of specific benefit from EMDs.

- Some EMDs are actually very relaxing and easy to learn at all level.
- After learning EMDs, I realized that I needed to slow down my life and learn to do more things just for myself.
- I have always heard about and have seen EMDs done from afar, but never really understood their relevance. By having some exposure to EMDs, I felt EMDs to be very calming and soothing.

Do they want to learn more EMDs (e.g., attending more EMD workshops)?

There were nine responses to this question including general topics and the topic of benefit.

A. General topic

There were five responses associated with this topic including deeper understanding of EMDs and nature of EMDs. Representative examples of this topic are:

- Because I feel that I have only scratched the surface of EMDs.
- I find EMDs extremely interesting.
- I like the discipline and technique aspect.
- It is very different from any other activity that I do.

B. Benefits

There were four responses related to this topic including widening view of physical education and relaxation. Representative examples of this topic are:

- I would like to broaden my approach to PE and increase the amount of tools that I have.
- I would like to investigate EMDs further to see the extent of how it has affected me or helped me become a more rounded person.
- I enjoy being relaxed and learning more EMDs.

Qualitative Findings from Interviewing Teachers and Consultants

Outside layer of understanding—teachers' and consultants' life in general.

A. Who were these teacher and consultant interviewees?

There were 12 teachers and consultants that participated in the interview. The four males and eight females had an average age of 43.25 (SD = 8.45). Seven were practicing teachers and five were consultants in physical education. Six participants took part in the new provincial physical education curriculum development committee issued in September 2000, two of whom were the leaders of provincial curriculum development.

B. How did they grow up?

Similar to student teachers' interview group, they were all Caucasian Canadians. Yet, most of them came from lower/middle class large families in western Canada due to the socio-economic circumstances 20 years ago. A few of them grew up in rural areas. Families had a considerable impact on their growth. A consultant recollected her childhood:

> My parents would always say that I got strong influences in my life from my teachers as well as from them. We were not a sports family and we had an active family in many ways. Our parents always encouraged us to be on teams. They saw that value being on the team. They always made sure that we had as many of those opportunities as possible. So, in a lot of ways, they supported us in that way, not directly as sport role models.

Since childhood, all teachers and consultants had remarkable success in physical activity, especially in team sports and recreational activities, from which they attained positive self-esteem. Many of them actually had abundant experiences in playing on the street, rather than in organized sports, which was significantly different from today's playing. One teacher portrayed his childhood days by explaining, "As kids, we grew up on the street. We just went out and played baseball, football, etc. That was the way it was. We did not watch a lot of TV or play computer at that time." A few of them were not only good at sports but they also helped their physical education teachers and classes.

Three of them had cross-cultural experiences, one teaching in Australia for a year as well as travelling in South Asia, the second one teaching in South America for a year, the third one traveled in Europe. The cultural interaction seemed to have a powerful impact on their view of others and themselves.

> Nepal was probably for me the biggest cultural change that I have seen in my traveling. I found it was very interesting. Their culture was quite different from us. Everything was different. The most impressing thing was, to me, that the way of their life was so simple compared to ours…. I can see, with our tourists coming into Nepal, how we change them. I do not know if it is a good thing, actually. So, it opened my eyes with something like that…. Many people think that those people are too simple and too poor. That was the way that I looked at it at first. It was quite scary

Middle layer of understanding—Learning and teaching physical education.

A. Why did they want to be physical education teachers?

Similar to student teachers' career decisions, the desire to be physical educators resulted from their success of physical activity, their love of working with children, and inspiration from their physical education teachers and coaches. A consultant stated, "I love working with youth to motivate them to be active and enjoy participating in physical activities. Also, I loved the gym and wanted to continue to play the rest of my life!" A teacher thoughtfully explained, "I love the joy of movement, share my passion, and impact future generations by teaching physical education. As a society, we are becoming movement illiterate. Our bodies are designed to move." One participant's decision came from the negative experience of observing classmates, especially girls, who sat out in physical education classes. She chose to be a physical education teacher because she wanted all children to involve, enjoy, and benefit from physical activity as she had.

B. Their teaching/consulting experience:

The teachers/consultants taught in public schools in western Canada. The average number of years of teaching/consulting was 16.17 (SD = 6.78) with a range of 7-23 years. Seven of them taught/consulted at the elementary level and eleven of them at the secondary level. All of them coached various sports. The majority of them had families. Therefore, commitments to teaching, coaching, and family made them feel overloaded. This was revealed to be a sketch of a typical physical education teacher's life. Here is an illustration of a physical education teacher's typical life: "For example, yesterday, I got home after a track meeting for six and half hours. I had no voice and I was hungry. I would usually feel exhausted when getting to April. It is just dragging." Most teachers/consultants had taught in a number of grade levels, schools, and socioeconomic environments, which allowed them to have a profound understanding of students, school, and society. A few of the participants were awarded for their outstanding professional performance at provincial and national levels.

C. What were the joys in teaching physical education?

All the participants related their joy to students, "because seeing the kids different everyday, even the same kids, which makes my job interesting." More enjoyment of teaching physical education was obtained from watching all students' learning, enjoyment, and success in physical activities, interacting with students in and outside of classes with mutual respect, and having a positive impact on their lifestyle. These joys "keep me going and keep me young." The greatest moment for many teacher participants was when turning back or transforming those students who had negative experience to physical education.

As consultants, their joy came from helping other teachers try new ideas and improve their professions, as well as connecting with people and facilitating projects.

D. What were the challenges in teaching physical education?

Many participants found that students nowadays were much more difficult to deal with (e.g., discipline problems, low attention span, disrespect, carelessness, skill variation, and reluctance in learning). Some identified that the modern society and family changes affected the children.

> The kids, nowadays, are not oriented towards sports and physical activities. They are oriented towards TV, movies, video games, etc. Their parents are the same, except the video one…. Kids do not do things on their own any more…. So, kids lost their spontaneity. Anything that they do is structured, organized, and even uniformed. I do not think that is going to change. It is going to become worse. I think it is a bad thing really unfortunately. If I have a class coming to the gym and I tell them, "Guess what? Today, you guys go to play." Most of them would not know what to do. This is a challenge that needs to overcome.

Participants commented about the overriding challenge associated with the fact that physical education was not valued by their colleagues and administrators. This was often more difficult to deal with than the challenges from students. In addition, the facilities/equipment, time, class size, liability issue, and support from administration were also challenging.

As consultants, the challenge was to persuade those who were practicing inappropriate teaching and not willing to seek for professional development. Additionally, it was sometimes difficult to have people realize that what we were doing made a difference for kids in the long term. Time, budgeting, and tedious meetings were also part of the consultants' frustration.

Inside layer of understanding—Views directly associated with EMDs.

A. Background information:

Prior to the interview, all 12 teachers/consultants in this interview group had experienced EMDs for an average of 8.36 months (SD = 16.94). The first time that they were exposed to EMDs was on average 5.85 years ago (SD = 6.61). One of them was still practicing on a regular basis.

The earliest EMD learner in this group was exposed to Aikido when he was 35 years old. Yet, what fascinated him was the philosophy and thinking behind EMDs. "The ability of Eastern meditative philosophy and martial arts lets you focus, calms the situation, and takes stress away from the situation, which has really interested me."

B. What drove them to learn EMDs?

A few participants indicated that they heard from their relatives or friends who took some EMDs, and felt that EMDs were becoming cool, as many kids learning Karate and adults were learning yoga. Yet, trying new things, mental health, discipline, peace, relaxation, fun, body strength, and body control seemed to specifically drive teachers/consultants to learn EMDs personally and professionally.

> It is a chance to do something different from what I have done before. It gives me another tool to use with students as a motivator and something different. And it also expends my perspectives both culturally and personally to embrace another culture and another way to do things.

Some participants thought more deeply and expressed their views from socio-cultural perspectives, "In our society, we tend to 'go, go, go' or 'rush, rush, rush'. We need to step back from that rat race, cool down, clam, relax, and to be self." A number of participants believed that what EMDs brought them was the piece that they missed the most in their lives.

> I tend to stay fit and to do the strong and hard stuff. The challenge for me is to do the slow, reflective, and calm stuff. That is not the second nature to me. That is something that I need to work on. I love yoga for that. I need to be balanced and to find the balance.

For consultants, they were also driven by looking for new things that could assist teachers in implementing the physical education curriculum and promoting those new activities in schools in local districts. EMDs had captured the attention of many consultants due to the novelty, lifelong health focus, and simplicity.

C. Why were they interested in or why did they accept EMDs?

Almost all participants felt that they had passed the stage of "interest" and got to the stage of "acceptance" resulting from their open-mindedness, their willingness to try new things, their motivation of to improve teaching, and the multiple benefits of EMDs. Three consultants associated their interest in or acceptance of EMDs with physical education curriculum outcomes. EMDs "address and fit well with the outcomes related to personal well-being as an opportunity for stress management, relaxation, and improved strength and flexibility in the provincial health and physical education curriculum." One teacher explicitly stated,

> It was very quick for me to go to the "accepting" stage from "interesting" stage. It all connects to my approach and my idea as a teacher. It just fits. That is why it has gone very quickly to the stage of "accepting."

Some participants' family involvement of Eastern approach, for example, medicine, was also a stimulus to their acceptance of EMDs. Since most participants had a Christian background, how they dealt with EMDs and their faith was one of the researcher's wonders during the interview. Many participants declared that they only focused on the health benefits from EMDs rather than on religious perspectives. Some explained that EMDs were not "preachy," did not attempt to change Western ways of thinking or to take over the physical education program. In addition, some students in some fundamental religious families were not allowed to participate in some physical activities, such as dance or gymnastics. A few felt surprised that people were paranoid by the apparent religious undertones of EMDs.

> I feel comfortable when I learn EMDs because I do not think there was a religious presence at all. Plus, EMDs have 5000 years history before any religion even occurred. I did not really see there is a connection between

> EMDs and religion. I felt quite surprised that there were some school boards that had said "No" to this type of research on school EMDs because there was a religious slant. I was like "Wow, my God. I never had that perception."

D. What did EMDs appeal to them?

A participant illustrated the philosophy behind EMDs that appealed to him by telling a story:

> You can possibly create energy or strength in yourself without going to the gym and working out, which we call it, Qi. I took that idea from Aikido. One day, our Aikido instructor let us raise our arms and have our partners to press them down. As long as I tried not to let my partner press down the arm I raised, he could always press it down. When I did not try but only imagine Qi flow up and out through my arm that was resting on a "steel cable," he could not press it down. Then, the instructor would walk around and used a finger to tap on your shoulder. As soon as he tapped on your shoulder, you just dropped your shoulder right away because you were obviously so focused on your arm. That is totally flipping things over from Western philosophy. I always do that with kids in the school, just about in every class. That is a huge part of what I try to teach them…. Of course, it does not work for everybody, because it takes a lot of training to do. But, some of them who buy into it can do it.

Another appealing part of EMDs was simplicity. In the West, people try to make things more complicated.

> I used to go down the States for big coaching conferences all the time. We would have someone from U.S. Track and Field Association, who would come and to have, for example, a shot put workshop. We would go for 4 hours. That guy broke down every motion into a thousand pieces. We also got 10 drills for every one of the thousand pieces details to do to make sure every detail in place. To me, it is too complicated. From Eastern point view, it would like "To be like a river, flow from here to there, and make the wind blow." It just simplifies things. That really appeals to me.

Yet, EMDs appeal to many participants was the capacity of calming, relaxing, slowing down, focus, reflecting, individual success, holistic wellness, and being self. Some teachers/consultants identified that EMDs were appealing for teaching because of their novelty, lifelong health focus, and minimal requirement of room, equipment, or time. However, some participants expressed that some EMDs such as Tai Chi did not appeal to them because of its complexity (e.g., too complicated to master Tai Chi in a limited time) and the difficulty when assessing students since EMDs were a type of the internal activity.

E. What surprised them in learning EMDs?

Many participants commented that EMDs looked simple but they found it difficult to make the moves perfectly, and it seemed that much more needed to be learned once they had reached a particular level. Interestingly, this did not frustrate participants but rather motivated them to pursue further learning. Many people had a pre-concept that EMDs did not require a lot of exercise. But, when doing EMDs,

> I am surprised at how much energy that it actually does or it expends. I do not mean in calories. I mean that you actually are using your muscles quite fully in it. It looks very simple. But, it is not. It is quite complex and you really do have to concentrate.

A similar surprise that the participants had was the EMDs' impact on them. "I am a very excitable guy. When learning EMDs, I can literally feel my heart rate slowing down. I felt very calm and did not feel jumpy or nervous, which surprised me. That really surprised me." Some participants also felt surprised by the philosophical or theoretical topics of EMDs. Yet, "When you are not brought up with them [EMDs], it becomes a surprise."

F. What surprised them in teaching EMDs?

What surprised the researcher was that three participants expressed no surprises when teaching EMDs in their classes.

G. What did EMDs satisfy them?

"Learning was the most rewarding thing. I use EMDs to a lot to my own personal satisfaction, not so much in teaching." Many participants expressed their satisfaction with physical benefits, open-mindedness, being slowing down, relaxation, internal well-being, formulating a holistic view, and knowing EMDs beyond merely the physical.

H. What did EMDs disappoint or frustrated them?

Most teachers/consultants did not have disappointing or frustrating moments in learning or teaching EMDs, but some still experienced difficulty with slowing down their minds, concentrating on learning, remembering sequences, and their lack of smoothness.

> It was a little bit difficult for me to do EMDs slow and fluent. When I watched you afterward, that looked very smooth. So, the frustrating part for me right now is that I do not feel smooth or really centered. Maybe, that comes from practice and you probably have done that for years. I am also wondering how to get to the inner peace or meditation level. Does it come from practice?

I. What were the values of integrating EMDs in physical education curriculum?

Similar to what teachers/consultants listed in the questionnaires, this group also identified values of having EMDs in regular school physical education program. For example, their values included to broaden ways of achieving the outcomes of health and physical education curricula, to open students' mind to different things, to develop an appreciation for other cultures, to benefit those disadvantaged students, to meet the needs of many different students, to reduce students' stress, to provide another type of non-competitive and individualized activities, to improve students' academic achievement, to help students to learn self-control, discipline, reflectiveness, personal well-being, and philosophy through EMDs. A consultant who was also one of the leaders of developing provincial curriculum felt excited about having EMDs in schools:

> I think that it is invaluable in addition to our program in a sense that anyone can do it, which aligns with our active living philosophy beautifully because anyone can do it. You skill does not have to be at certain level. Everyone can be involved to his/her own degree. So, that is crucial. The other thing to me exciting about introducing EMDs into anyone's program is that it would be new for students of junior high or high school age. So, with new experiences, that makes everyone on an equal plane field. In physical education class, often, there are those students that have awful a lot of skills. They can dominate a physical education program if we do not have experienced physical education teachers. If you bring in an activity that is new to all of them, it evens the plane field. Those kids who do not have those skills can rise to the top, at least be even on the plane field. So, I am excited about that or that opportunities.

The other consultant just returned from helping enhance a school physical education program that included having a community yoga instructor as part of program promotion to teach all students in the school. Based on her experience and observation, she commented:

> The kids' reflection on it was that they really need that because they really need to learn how to relax. The kids even understood the value of not doing activities to compete but doing activities for self and doing activities that help them feel better about themselves. We do not give kids a lot of opportunities for that. We usually give them opportunity to score

> and reach some goal that is target-oriented or score-oriented. Just to do something so that you satisfy yourself internally is not something that we spend a lot of time with kids. So, I think EMDs is really needed. Those are important skills for kids. I think EMDs have huge places in our curriculum.

J. What concerns, challenges, and difficulties might they experience or anticipate in trying to integrate EMDs into school physical education programs?

Many participants were concerned about their lack of knowledge and confidence in teaching EMDs, their colleagues' close-mindedness, the students' initial negative attitude because EMDs were new and not normal for them, peer pressure among students, potential violence from learning martial arts, the school budget if having experts to teach EMDs, and religious concerns from parents. Similar to the student teachers' group, few concerns about administration were stated, probably because, "they really treat you like a professional. They think that you know your discipline. So, I do not see any challenges there." In addition, a consultant explained optimistically from a multicultural perspective:

> Things are changing. Teachers should understand that there is probably more and would be more acceptances, now, because of the multicultural aspect that we have in our schools. So, it might not be as much a challenge or kids accepting this type of opportunity as they might think. It is just that people do not have a lot of background in this movement or in this discipline. They do not. Our kids do not. However, if there are cultures that we might think that they might have this background in their

> families, parents, grandparents, and so on, there is another way to perhaps bring that out in our children.

However, one of the participants used to work at the administrative level of the provincial ministry of education. She got five phone calls in three years from parents who expressed their concerns and complained about having EMDs in school physical education programs because of its potential for violence and its religious undertones. One participant cautioned that we "have to discern the fact that students are not feeling comfortable to do it because they just do not want to do it versus that they really have a particular issue. Then, you deal with it as it arises."

K. Did they consider integrating EMDs in their physical education classes?

Prior to the interview, three participants actually taught EMDs and four invited experts into school physical education programs. The remaining five expressed their willingness to integrate EMDs into their own programs due to the multiple benefits from EMDs. Yet, one consultant calmly stated,

> I think that the biggest thing with all these whatever you decide to do in your PE program is to relate to the outcomes. Where to fit into the curriculum would be a big thing. It is not just to bring in someone because it is neat to know EMDs, but because it actually fits in the curriculum.

As a response, the other consultant recalled when developing the new provincial physical education curriculum, "We should absolutely incorporate EMDs. EMDs actually were already in our provincial physical education curriculum as suggested activities. It was everyone's idea in the curriculum committee, not just the other leader's or mine." One participant pointed out insightfully:

> We paid a lot of lip service to individualized or developmentally appropriate programs. I think that we still have a long way to go. But, I believe that activities such as EMDs would get us a lot closer to that because it is so individual. These are the kind of activities that we need to be including in our PE programs as best as we can for the future.

L. How did they visualize or foresee EMDs in Canadian or Western physical education programs?

Unlike student teachers, all participants envisioned integrating EMDs into Canadian or Western physical education programs more optimistically. Many suggested starting with those open-minded pre-service and in-service teachers by providing courses or professional development workshops because "the bigger picture has to start with the smaller picture." Someone foresaw that EMDs could be integrated into school, not only in physical education program.

> I can see it can be a week a couple of weeklong unit, in which we do Tai Chi as a regular base. It would also be great if the whole school in their classrooms did 5 or 10 minutes of Tai Chi and sat down quietly for next class. So, I can see it is incorporating on a wider scale. Also for staff, I think it would be good for their health. It is beyond PE programs.

One consultant also pointed out the importance of offering necessary teaching support and promotional strategies and resources, such as videotapes, manuals, and finance, because teachers taught what they knew. One participant who had the opportunity of attending numerous national meetings in the area of physical education affirmed this explicitly:

> If you went to every province, you would find Tai Chi, Judo, yoga, etc. that are suggested for students' learning. People are not stopping that from happening into the school. But, it is more important to train teachers how to teach this during classes. So few teachers have been trained in that area. Again, it depends on teachers' expertise. Teaches have expertise in basketball, volleyball, track and field, and so on. They teach what they know. So, we need to get it at university level. You need to get on the "circuit" and speak at all teachers' conventions, all professional development, and all provincial physical education conferences. You need to be offering a lot of sessions there. In doing so, we can increase teacher education so that they can take it back to their kids. And you need to get that to a useable manner.

M. What were the values of integrating EMDs into university physical education teacher education (PETE) program?

Many participants believed that pre-service teachers were the best ones to be learning EMDs because they were the ones who had not become structured or engrained in tradition and who were open to new ideas of the new curriculum. "They need to know this. They have recent skills and recent information. They can bring those as student teachers to teach their cooperating teachers. So, there is benefit to both sides personally and professionally." Participants also addressed this expectation from the rationality of providing a variety of activities for school students.

> The more different things you have for the students, the more you can hit every student at least once or twice in a year with things that they really enjoy and take on as lifetime activities. Again, EMDs are something that is totally different than anything else we do, really. So, it would be valuable to teach pre-service teacher EMDs. Otherwise, it is easy for them to fall into the traditional mode of teaching in which they have been taught and only a few sports are offered and only those jocks benefit in schools.

None of the participants saw problems when integrating EMDs into university PETE programs. "The only problem would be how you implement it, and how to get teachers to learn and teach that, which is the same problem with so many things in physical education and so many things in education." Yet, one participant who taught in university PETE programs knowledgeably cautioned that she would only teach EMDs in the context of student learning outcomes. "We might try some activities to support these outcomes. I focus more on the outcomes than on specific activities to reinforce the concept that the activities are simply a means to addressing the outcomes."

N. Would they change views or ideas about EMDs in the future?

Five participants stated that their views and feelings remained positive since their first experiences of EMDs. Yet, they felt that they learned more and wanted to learn more about EMDs. One participant expressed:

> I am more convinced than ever that more people need to do this. It is not good if people are over-religious because they have lost the touch with the other side of the world and they need have a balance of both. They do not have to give up their own religion. You do not have to experience 10 different activities, but to do one that is explosive and powerful in a very calm and reflective way. You still develop muscles, thinking abilities, and have the quiet time for yourself to relax. Even, the Olympic athletes can benefit from EMDs.

Three other participants shared a similar thought when describing their change of feelings. They went from "mental curiosity" to experiencing calmness and less stress and they felt "grounded." What EMDs did to them were really holistic, which meant that they were not just looking at their physical activities or their health, but looking at their spiritual, emotional, mental, and intellectual well-being. They thought that EMDs really covered all those bases. They became more open and less fearful of change. It is not about the fear of taking a "risk" but trying something different. They changed and felt that it was great for everybody. "It does not always have to be the same stuff." Another participant indicated a change in her feelings by reaching her inner self and learning more about those non-competitive and less vigorous activities.

O. What were their reactions to the EMD workshop and the interview?

There were eight participants involved in the EMD workshop that the researcher offered prior to the interview and the rest also partook of EMD presentations that the researcher provided. They all seemed to appreciate and enjoy the opportunities of learning EMDs.

However, one participant cautioned the researcher about wearing traditional costumes when teaching EMDs, because it might be problem for some Westerners. Another participant has heard people saying, "Oh, yeah, you are so caught up in your culture. You cannot leave it back. Come on, you are here now, give that up."

In terms of the interview, many participants were willing to assist in the research and felt that their involvement would even help their own teaching. "I just find many of the thoughts in the interview questions would go into much more details and background, and would strengthen the physical education components." A participant thoughtfully commented:

> You know what I love about this is that you actually put into practice about what you know, the nature of how you are gathering data by getting to know people. It is the practice of how you live and how you reach people. You listen and think. You are very thoughtful and reflective. That already comes out in whatever I see you, which is very evident. But, it is wonderful to see you to put that into practice in terms of how you are going to do your doctoral thesis. That is fascinating to me. That is wonderful.

One of the leaders engaged in provincial physical education development thought deeply about the relation between the curriculum outcomes and EMDs during the interview. She pondered that although we should address outcomes rather than being caught up by specific activities, we did not have a lot of thoughtful, purposeful, reflective, and internal activities to students' benefit. That was the missing piece.

> Teachers are going to continue to ignore them until we do something with that piece. I think we have to almost start putting out some directions and identifying needs. I am not sure if the outcomes do that well. How do we get the outcomes to say, "You are missing that piece"? I do not know.

Summary

The purpose of this chapter was to present the rich data obtained from quantitative and qualitative investigations, primarily, from questionnaires and interviews in answering the two specific research questions stated in Chapter 1. The findings included: 1) The statistical results in the two student teacher groups indicated that, as a result of EMD intervention, significant changes occurred in student teachers' views of "student teachers should learn EMDs," "practicing teachers should learn EMDs," and "confidence in teaching EMDs" in the experimental group. No significant change was found in the comparison group. 2) Through questionnaire responses, student teachers and practicing teachers/consultants identified "the values/benefits for schools, teachers, and students to have EMDs" from the topics of philosophy, culture, variety/diversity, new activity, student/learning, teacher/teaching, and health benefit. In addition, concerns, difficulties, and challenges were recognized from the topics of qualification, student, parent, religion, violence, safety, curriculum, and time. And, 3) Values, concerns, and related issues were discovered through the three layers of understanding participants: participants' general life, their learning/teaching physical education, and their views directly associated with EMDs. Findings from all the sources listed above coherently echoed each other, which provided a portrait of an enriched and holistic understanding of the research questions:

Why should -- and how can -- EMDs be integrated into Western physical education curriculum studies? The interpretation and discussion of the findings will be presented in the next chapter.

CHAPTER 6: INTERPRETATION AND DISCUSSION

The newborn child carries a message from the world where the resource of all wisdom is located and they forget just as soon as they are old enough to transmit it.

(David Kennedy)

This chapter is intended to interpret and discuss the findings presented in the previous chapter in relation to the theoretical foundation and literature review of the present study. All the issues discussed below are directed and surrounded by the research question: Why should, and how can, EMDs be integrated into Western physical education curriculum? The following discussion interweaves insights from the theoretical foundations, literature reviewed, and the interpretation from the findings.

Why should EMDs be integrated into physical education curriculum?

The first research question asks, "Why should EMDs be integrated into physical education curriculum?" or "What are the values or benefits from integrating EMDs?". Related questions are, "What if we do not have EMDs? Does it really matter?"

The Values of EMDs

Many participants in the present study identified the three basic values of EMDs from their Western perspective. For example, they considered body-mind connection as philosophically beneficial, as relaxation for health, and as self-control and respect for education. However, few of them could penetrate the unfathomable core of EMDs.

EMDs consist of Eastern martial arts and Eastern meditations, which all have three basic values: *philosophy (learning the universe, nature and human being, and self), health (keeping fit and healing disease), education (being disciplined and self-control), and culture (heritage)*. Eastern martial arts have one more value: the art of combat (*self-defense)*. Yet, the value of combat (self-defense) in Eastern martial arts started waning due to the disadvantage when confronting Western intrusion with "hot" weapons (firearms) in the nineteen century (Xu, 1996).

In addition, a number of EMDs have been rapidly modernized along with the social, economic, and cultural transformation in the East since the mid 1900s (Kauz, 1977; Xu, 1996). Two more values become visible, *recreation and athletics (being sportized with the Olympic trend)*. Recreational EMDs demonstrate that EMDs are no longer the privilege of the relatively small martial arts professional population. The acceptance of the ideology of Western democracy in the East propels EMDs to be available to the public and beneficial to the masses, especially for the sake of health. The format of competitive EMDs is essentially Westernized or sportized. For example, Judo, Karate, Kung Fu (Wu Shu), Taekwondo, and other martial arts have been formulated under the Olympic paradigm. The martial artists resemble gymnasts in their performance searching for aesthetic and public exhibitions and hunting for champions, which completely departs from the heart of Eastern martial arts: "self-enlightenment" (for approaching to Dao), the philosophical root of EMDs.

Eastern meditation practice such as yoga and Qi Gong is also inclined to be demonstrated in the form of exhibition and competition periodically (Martial Art Administration Center of State Department of Physical Activity, Sport, and Recreation, 1998). However, due to the nature of highly internalized practice, Eastern meditation seems to be unattainable and seems to be ridiculous to be sportized.

Ironically, authorities in Eastern countries strive to sportize EMDs through every possible means. This perplexing phenomenon most likely rises from humiliation by the Western intrusion during colonial times. Easterners intend to demonstrate that they are not inferior to their Western counterparts and Easterners are able to do anything that Westerners are able to do, although the Easterners' endeavors may contradict their will. It is perceivable that when Eastern countries gain superiority in economic, political, and military power, they will have no inferior feelings when confronting Westerners. At this time, it will be more likely for them to practice original thought from traditions freely without fear of further military, political, and cultural invasion (Lu & Yuan, 1991).

EMDs and Philosophy

A few participants from both student teacher and teacher/consultant groups identified that having EMDs helped them understand the body-mind relationship. One individual even realized that EMDs demonstrated that philosophy could be taught through physical movement. These two points actually represent the basic and unique benefits for Westerners of learning EMDs at the philosophical level.

It is noticeable that a large number of Westerners have been increasingly keen to learn Eastern philosophy such as Daoism and Buddhism. Yet, many of them experience frustration and confusion. Those who gain considerable knowledge of Eastern philosophy seem to lack a full understanding because Eastern philosophy requires embodied understanding rather than understanding that is solely theoretical. This is precisely what Eugen Herrigel, the German philosopher, experienced in learning Zen (Herrigel, 1989). It would be much easier for children and youth to comprehend the obscure Eastern philosophy and obtain other benefits if EMDs could be part of school physical education curriculum. Based on the EMD experience of a new generation, it would ease the alien feeling and misconception of Eastern thought in Western society, which is identified by Clarke (1997). Specifically, this is the transposition that Gadamer (1994) suggests in terms of understanding each other.

For centuries, the body-mind relationship has been an enigma and caused substantial problems in the West (Mechikoff & Estes, 2002), in contrast to the East where there has been little concern about the body-mind relationship. As Kleinman (2003) uncovers, there are two typical responses to "what is your mind?" or "what is the body-mind relationship?" for the Easterners: 1) They do not understand the question; and 2) For those who understand the question, they do not know how to reply. It would be the same for Easterners to answer questions such as, "What is the relationship between the left hand and right hand?" For myself, who grew up and lived in the China for over three decades, I have felt extreme tension while exploring body-mind relationship during my doctoral research for the past few years. Analogically, it seemed like prying my eyes out in order to look at the back of my own head: it was painful and superfluous because I did not need to look at the back of my own head. Zhang Zi, one of two primary Daoist gurus, tells a story about the head and tail of a snake: the head and tail are opposite but are in inseparable oneness (Chinese Philosophy Unit of Philosophy Department of Beijing University, 2001), as are body and mind, left and right, and yin and yang.

Kauz (1977) discovers that Western students are unaware that the Eastern view of humans differs from their own: in general, Eastern thought about humans does not divide them into body and mind. Kauz suggests that students do not feel surprised when beginning to notice their EMD instructors' concerns with more than students' physical development. The participants in the present study were experiencing the process of snake's "head-tail" relation during the learning of EMDs. That was why some of them implied that they had a better understanding of EMDs or improved body awareness. Yet, when reaching a certain understanding of snake's "head-tail" relation, especially when reaching the understanding of yin-yang relation, the participant would "feel" that it was difficult to answer the body-mind relationship question because it was not supposed to appear as a question. In fact, it is not difficult at all to achieve this understanding. For example, at the end of an EMD workshop (Tai Chi and Qi Gong), when I asked the participants whether I was teaching a type of "physical" activity, they "physically" felt that it was not a type of "physical" activity or a type of "mental" activities. Some of them felt perplexed when encountering this question. It is this perplexity that we are aiming for during the learning of EMDs.

The true understanding of the body-mind relationship is when we sincerely do not know how to respond adequately. When the question is no longer relevant to the person or when the question vanishes in the person's "mind," he/she, as a whole human, truthfully gets the answer. This is also identified by Western scholars such as Kennedy (1993) who states that to "know no self" means that all of the nature becomes self, and Smith (1999a) who declares, "The Self cannot understand itself until it loses itself in the work of great relinquishment" (p. 24). EMDs are neither a type of physical activity nor a type of mental activity. EMDs are a path to approach the understanding of the self, life, and truth. That is why EMDs amazed one of the participants: EMDs can teach philosophy through physical movement.

The other ancient theoretical foundation of Eastern culture, the Five-element theory, may also help understand the body-mind relationship. In Table 14 (see page 246), it precisely demonstrates how the human body (i.e., organs) and mind (i.e., emotions) affect each other (see details in the section of "EMDs and a new understanding of health and wellness" in this chapter). For thousands of years, Easterners have viewed mind-body as Yin-Yang, a non-dualistic but holistic unit in which one constantly influences the other. In practicing EMDs, people regulate Qi freely crossing meridians (energy channels) in the body in order to achieve the balance of Yin Qi and Yang Qi to prevent or heal diseases. EMD professionals also acknowledge that the most important part in training is not the physical but the mental aspect. In fact, EMDs are primarily designed for finding "Dao" (truth) while health and other benefits are merely natural by-products. That is why a real martial artist is usually a philosopher and a medical professional, which Buddhism would refer to as "truth as healing" (MacPherson, 2001).

This mind-body reciprocal effect has been evident in both theory and practice in the East for thousands of years (Martial Arts Administration Center of State Department of Physical Activity, Sport, and Recreation, 1998). Tai Chi, yoga, and Qi Gong as "physical" activities function as mental movements per se. Master Zhenduo Yang, the fourth generation of Yang style Tai Chi, states clearly (Smalheiser, 1998):

> Whenever we move, we start with the mind and the mind intention first. It is the mind that leads the movement. So when you start to play Tai Chi

> Chuan, before you move, you must get rid of unnecessary thoughts as much as you can and balance your Qi and settle your mind before you begin. (p. 6)

As Kauz (1977) experiences, the qualities of body and mind gained from a study of EMDs would have stood an individual at every age in good stead. Aside from having elements that can enhance the quality of our life, EMDs "can bring us to a sense of our wholeness" (p. 141).

EMDs and Culture

Approximately one-fifth of participants' responses were linked to integrating EMDs with "culture" issues. The increasingly cultural diversity in Western society trickles down to the school where multiculturalism is gradually taking place. The recent consensus indicates that Asians have been ranked as the largest group of immigrants in Canada. There were 58 per cent immigrants from Asia during 1991-2001. Chinese became the biggest visible minority group, representing 3.5 per cent of total population in Canada, among over 200 different ethnic origins in Canada in the 2001 census. There were nearly half a million Chinese living in Toronto and almost 18 per cent of the population in Vancouver was Chinese (McCarten, 2003). Chinese students comprise the largest population, up to over 90 per cent, in many classrooms in the Greater Vancouver area.

Some practicing teachers in this study started questioning whether or not it was appropriate to teach all those immigrant students employing complete Canadian/Western curriculum. Some teacher educators asked, "Do we really have a multicultural sensitive curriculum in Canadian schools?' or "Should we address non-Canadian culture in our curriculum?"

In fact, as some participants in the present study explicitly critiqued that the current curriculum needed to include non-North American or non-traditional physical activities. In so doing, it would broaden students' horizons, enhance awareness, and enrich the experience of cultural diversity in schools. In the meantime, it helped to understand Eastern culture and the students from the East. This also demonstrated our appreciation and acceptance of different cultures in our progressively diverse society. One participant warned:

> EMDs have developed for thousands of year. It is not just some wacko trends coming from California. EMDs do not just involve one group of people, for example, Chinese, Indian, Korean, or Japanese. Basically, billions of people have similar ways of thinking. In fact, if we do not start accepting more of this kind of thinking that is outside our box, then, we are getting into trouble. We see that. North America and Western Europe have a tremendous amount of economic and military power in the world. If they do not start recognizing and accommodating a lot of what is going on philosophically in the rest of the world, we get big problems. Because, the rest of the world feels frustrated, I think. For example, Muslims do not feel that they are accepted.

This practicing teacher's comment resonates with the work by scholars such as Bhabha (1994), Brown, Halsey, Lauder, and Wells (1997), MacPherson, (2001), Smith (2002a), and Young (2001) in the areas of cross-cultural studies, globalization discourse, postcolonialism, and postmodernism. As previously discussed in Chapter 1, these theories unlock the door for the suppressed and marginalized cultures. Smith (1999a) affirms that Western economic and political power relied upon the suppression and obliteration of others since the Renaissance, and now others allege their place within the new arrangement of world order. One of the leading psycho-sociologists, J.W. Berry (2001), as well as other immigration psychologists (Bourhis, et al., 1997), also confirm the importance of accommodation and intercultural relations rather than merely assimilation in immigrant and immigration studies. Delpit (1997) suggests that cross-cultural dialogue not only requires open eyes and ears but also open hearts and minds. "It is not easy, but it is the only way to learn what it might feel like to be someone else and the only way to start the dialogue" (p. 594). Teachers are in an ideal position to play a role in getting all of the issues on the table in order to initiate true dialogue (Delpit, 1997).

EMDs and a New Understanding of Health and Wellness

Almost all participants addressed general or specific health benefits of learning EMDs. Some participants realized that EMDs helped them have a better understanding of health, well-being, and healing, and helped them see a different means of reaching a healthy lifestyle. The majority of the participants expressed physical, psychological, and social benefits such as relaxation, concentration, body control, and other health and skill related fitness through EMDs. A number of participants even utilized Eastern terms such as Qi and Yin-Yang to describe health benefits. Yet, it is unreasonable to expect the participants to have a comprehensive understanding of Eastern thought including health aspects as a result of time constraint that the participants had for learning EMDs during the present study.

Fundamentally speaking, Easterners have a different view of the human body, health, illness, and wellness. Eastern health is based on Eastern philosophy and Western health is based on science. Chinese movement disciplines, traditional Chinese medicine, Chinese cooking, traditional Chinese arts, traditional Chinese architecture, for example, are all based on Eastern philosophy. In other words, it would be unlikely to understand EMDs without knowing the underlying Eastern philosophy, and it is also true that learning EMDs is the process of learning Eastern philosophy (Lu & Yuan, 1991). Simultaneously, Chinese and Eastern Indians developed a similar outlook on human body and health thousands of years ago (Devi, 2000; Martial Art Administration Center of State Department of Physical activity, Sport, and Recreation, 1998; Werner, 1977), which significantly differed from that of Westerners (see Table 13 on page 246).

As discussed earlier in Chapter 1, the cause of disease is philosophically the violation of the Dao in traditional Chinese medicine. Qi is the envoy of the Dao. TCM, which has worked successfully for thousands of years, is among the most influential medical systems in the East and is increasingly recognized by the Western world. According to traditional Chinese medicine (Li, 2001), one is inclined to suffer disease if:

A. The person does not have enough strong good Qi, which implies that no one can guarantee the maintenance of strong good Qi unless he/she takes care of himself/herself in terms of diet, lifestyle, etc.

B. The Yin Qi and Yang Qi are not balanced as a result of excessive Ying Qi or Yang Qi. This indicates that no one can have absolutely balanced Ying Qi and Yang Qi, only relatively balanced Ying-Yang Qi. This requires that we have to look after ourselves. This concept of "prevention" is far more meaningful than what Westerners perceive.

C. Qi does not flow freely along the energy channels in a live body. Yet, Qi always moves in any live body, and the termination of the moving indicates the end of life. This message encourages us to relax through our daily routine. If we are stressed out and driven by external things, we are inclined to lose ourselves and not be ourselves, which will eventually become a recipe for getting physical and psychological diseases because Qi in our body becomes stagnant.

D. Qi is in disarray. Many diseases result from the problem of Qi. The person would be healthy if Qi was under control and in harmony and "the person would tend to be ill if his/her Qi moves in disarray" (Jiang, 1995, p. 68).

The other Eastern aspect that is different from Westerners' view of health is that there is a direct and accurate health impact on the human body from human emotion. Western scientists and health professionals have known that physical activities or treatments (e.g., medicines) can relieve the effects of some mental problems. But how the mind affects the body is far from comprehension. Only recently having been prompted by some alternative medical practice, do some Western professionals turn to realize that the linkage of body and mind is a "two-way street." Doctors identify physical problems when patients suffer psychologically (Chaline, 1998; Nuland, 2001). For thousands of years, Chinese have believed: excessive anger hurts the liver, excessive joy the heart, excessive sympathy the spleen, excessive grief the lung, and excessive fear the kidney

(Xu, 1991) (see Figure 20 on page 256 and Table 14 on page 246 for more details of the Five-element theory).

In contrast, Western culture tends to promote the idea of "the more, the better." For instance, the most influential sport ideology, the Olympics, stresses "Citius (faster), Altius (higher), Fortius (stronger)" as its motto or spirit that represents one of several core values in Western thought. From the perspective of traditional Chinese philosophy or medicine, any excessiveness may result in health problems or disease. This idea was identified by a few participants in the present study. One student teacher expressed that people did not have to work with their extremes in order to be productive at the expense of hurting self. One practicing teacher started pondering this type of Eastern thought:

> That whole philosophical change from Western to Eastern makes me think: Should we always encourage our students to be faster, higher, and stronger in comparison to others? Should we teach them how to slow down, to be with self, and do things only for self?

Another teacher questioned:

> It seems that people doing Tai Chi or yoga do not really get fit or healthy by only waving arms around. What if we put the heart rate monitor on them? Plus, how could we assess them since EMDs are more internal or mental oriented? But, we all know it is a great type of exercise.

These interrogations were also reflected in the collected journal written by the student teacher participant.

The participants' comments align with the beneficial procedure of practicing EMDs: slowing down? being quiet ? being with self? letting Qi flow? balancing Yin

Qi and Yang Qi? strengthening good Qi? achieving and maintaining health. There is a palpable conflict between Eastern and Western views of health in both theory and practice. Yet, it appears that this would be a challenge as well as an opportunity to learn and a benefit from Eastern thought for both teachers and students in the West.

EMDs and a Holistic View

A number of participants appreciated the body-mind integration and a holistic health view in Eastern thought and movement disciplines. They were inclined to point out the analogous idea of oneness or wholeness in Eastern culture.

"Yoga" is derived from the Sanskrit root, "Yuj," that means to bind, join, attach, and yoke, to direct and concentrate one's attention on, and to use and apply; it also means union or communion (Devi, 2000; Whaley, 1974). Similar to other EMDs, yoga is a theory and practice aimed at unifying or integrating self and the universe, body-mind, mind-spirit, and so on. Ontologically, ancient Chinese culture believes that the universe is an integral and inseparable wholeness (Li, 2001; Zhu, 1993). Everything in the universe originates from and is unified within the wholeness. This wholeness is also described as "Dao" (Martial Art Administration Center of State Department of Physical activity, Sport, and Recreation, 1998). The Daoist ontology is the epistemology of EMDs (Xu, 1996). To Lao Zi, "Dao" is the "oneness" (Lao, trans. 1994). Dao appears in the form of Qi. Everything in the universe originates from Qi (Yin-Yang Qi) and is the product of the change of Qi (Yin-Yang Qi). Yet, Qi itself never changes substantially. As indicated in the Five-element theory, things in the universe are opposite and complementary to each other; each promotes and restrains each other (see Figure 20 on page 256 for details), which formulates the harmony in the universe. Therefore, the view of anything including human life, health, body-mind relationship, has been placed within the big vision of the universe. In traditional Chinese philosophy,

> Human and nature are an integral wholeness, which is called "human-nature integral view." Fundamentally, human and anything in the universe derive and evolve from the same root, Dao, Yin-Yang Qi, and five-element Qi. Therefore, Dao is "one" that cannot be separated. (Martial Art Administration Center of State Department of Physical activity, Sport, and Recreation, 1998, p. 171)

This human-nature oneness view indicates that a) human and nature are fundamentally the same, which means that nature is the big universe and human is the miniature universe; and b) human and nature are essentially connected, which suggests that human follows nature and does not go against it in order to survive and develop (Xu, 1996). It also refers to the integral harmony between human and the surrounding environment, between human and human society. Therefore, in traditional Chinese medicine, professionals diagnose and provide treatment based on seasons, geographical location, and social characteristics of particular patients (Li, 2001).

Eastern movement disciplines also employ this holistic oneness view. People actively apply Qi or prana (Qi in Sanskrit) in their EMD practice (Jiang, 1995; Martial Art Administration Center of State Department of Physical activity, Sport, and Recreation, 1998). In fact, people could directly perceive or feel the existence of Dao when achieving a certain level in yoga or Qi Gong (Lao, 1994). Many EMDs adopt what is observed and learned from natural phenomena such as mountains, thunder, clouds, water, animals, and flowers as practicing forms as well as taking seasons and location (external settings) and human organs (internal settings) into consideration. Therefore, it is natural and not difficult for people who learn EMDs to achieve the holistic view of things, including human being (body-mind), human society, health, life, nature, and eventually, the universe.

EMDs and Curriculum

Since the middle of nineteenth century when physical education was initiated as school curriculum, the focus has evolved from physical training to enhancing performance-related fitness and competitive sports skills. Currently, the emphasis of physical education is health-related fitness, the behavioural competencies, and motor skills needed for lifelong engagement in healthy and satisfying physical activity (Kirchner & Fishburne, 1998; Rink, 1997). Many countries have developed national standards for physical education. Consequently, states/provinces and local school districts have adopted national standards in their curriculum development respectively (Rink, 2002, Siedentop & Tannehill, 2000). Rink (1997) declares that a quality physical education curriculum should include:

A. the mastery of basic skills and understanding of motor skills related to a variety of physical activities so that each individual can make positive decisions about physical activity choices;

B. experiences that encourage children to question, integrate, analyze, communicate, and apply cognitive concepts about motor skill and physical activity;

C. opportunities to improve social and cooperative skills, and to gain a respect and appreciation for diversity; and

D. use of fitness education and assessment to help children understand, enjoy, improve, and/or maintain their physical health and well-being.

The new physical education curriculum in the province, where the present study was situated, was launched in September 2000. It aligned with national guidelines promoted by CAPHERD (Canadian Association for Health, Physical Education, Recreation and Dance, 2003) and modifications from other provinces. There are a few characteristics in the new provincial curriculum that may represent recent changes in physical education curriculum development in Canada as well as in the West to a certain extent:

A. No physical activity was required or prescribed. Physical activities for individual school physical education curriculum should be selected based on factors such as students' needs, teacher's expertise, resources available, and safety considerations. The only one requirement in the curriculum was that all five types (categories or dimensions) of physical activities must be taught, including alternative environment activities (e.g., aquatics, outdoor pursuits), dance (e.g., rhythmic and social dance), games (e.g., innovative and target games), types of gymnastics (e.g., acrobatic and educational gymnastics), and individualized activities (e.g., track & field, movement arts).

B. The aim of the new curriculum was to enable individuals to develop the knowledge, skills, and attitudes necessary to lead an active and healthy lifestyle. It de-emphasized competition and team-sport but promoted cooperation, enjoyment, participation, effort, and more individual lifetime activities.

C. It was outcome-based rather than activity-based, allowing teachers to select any activity as a means to achieve the general and specific outcomes.

Almost all participants were aware of and familiarized with the new provincial physical education curriculum. Yet, a few consultants revealed that many teachers in the field still taught in the old mode that focused on competitive team sports. In fact, a physical education teacher questioned one student teacher participant in the present study when she was teaching EMDs during practicum: "Why are you doing yoga? This is a physical education class."

Similar to what Canadian Association for Health, Physical Education, Recreation, and Dance (CAHPERD) suggested, this new provincial physical education curriculum also classified martial arts and Eastern meditation practice (yoga) under one of the five categories called "individual activities." As one participant who represented this province in CAHPERD stated, "If you went to every province, you would find Tai Chi, Judo, yoga, etc. that are suggested for students' learning. People are not stopping that from happening into the school." Interestingly, EMDs are employed to facilitate students' learning in other subject curricula outside physical education as well (Hildreth & Matthews, 1997; Lunetta & Cheng, 1987).

Many participants considered EMDs as a new activity to motivate students' learning and to add to the "diversity" or "variety" of activities to which students could be exposed and eventually choose as lifetime activities. Yet, some consultants cautioned that it did not matter what kind of activities teachers selected; what mattered was that what they taught should align with the outcome-based curriculum. However, one consultant worried that the new curriculum missed addressing the type of outcome that allowed for thoughtful, purposeful, reflective, internal, deliberate, and controlled activities. In other words, the outcome that teachers were driven by would be problematic if it failed to address the missing piece.

In fact, what is missing here is not just that piece, but also the pieces of the body-mind relationship, multiculturalism, and holistic health/wellness. Questioning whether or not to integrate EMDs does not mean adding more issues in physical education curriculum theorizing and development, but rather reconstructing or reconceptualizing physical education curriculum from the lens of curriculum theories. Generally speaking, the fundamental problem in contemporary physical education curriculum derives from the barren land of curriculum theories in physical education. Admittedly, the bottom-up way of curriculum design could motivate teachers in terms of curriculum implementation. But the shortcomings in this type of design are also evident, especially in terms of theoretical foundations supported by scholars from both physical education and education. For example, it appears that few committee members of curriculum development in this province have a profound understanding of current physical education curriculum theories (e.g., curriculum models) and schools of curriculum studies, which could be analogous to a building without a solid base or traveler without a clear direction.

It may be less arguable that the nature of physical education is "education," not "physical;" the dominant nature of the physical educator is "educator," not "physical." The development of physical education should be anchored in research accomplishment from both education and physical education per se. Unfortunately, there has been a deficiency in absorbing curriculum theories from education within the academics of physical education. Although the three schools of curriculum and instruction studies (i.e., traditionalist, conceptual-empiricist, and reconceptualist) have been established since the 1970s (see works by Giroux, Penna, and Pinar in 1981, and Pinar in 1975), leading physical education curriculum texts (see texts by Jewett, Bain, and Ennis in 1995, and Stillwell and Willgoose in 1997) and leading physical education instruction texts (see texts by Rink in 2002, and Siedentop and Tannehill in 2000) barely indicate sources of the three schools' thought.

In contemporary physical education, it is obvious that "curriculum design or development—implementation—evaluation" from traditionalist theorizing mode is widely employed, and conceptual-empiricist's "hypothesis—testing—generalization" is adopted in curriculum research. Curriculum developers in physical education are unaware of the atheoretical and acontextual stance of Traditionalists and the ahistorical and apolitical pose of conceptual-empiricists. Many curriculum developers believe that curriculum should serve practitioners based on teachers' mind and focus on schools. These curriculum developers have less interest in basic research, theory development, and related development in allied fields, but more emphasis on the reality of classroom and school settings. To them, curriculum should be dominated by administrative notions. Curriculum is viewed as the arrangement of time and activities to be managed in accordance with reliable business principles (Giroux, Penna, & Pinar, 1981). The local provincial physical education curriculum was essentially developed in a traditionalist curriculum theorizing mode influenced by Frederick Taylor's scientific management notion.

To the contrary, the reconceptualist school of thought acknowledges the political, social, historical, theoretical, contextual, and complex aspects in curriculum studies. It considers human subject as a centre of attention and inquiry. Reconceptualists ask how meaning can be generated instead of mastering other's meaning, which is in line with what Metheny (1954) suggests, "Bodies, not games are our business" in physical education. The reconceptualist school of curriculum theorizing with a hermeneutic and phenomenological basis corresponds with somatic theoretical foundations, in which both encourage borrowing others' traditions, especially from Eastern philosophy and practice. Somaticists promote that physical education should enhance the feelings of "at homeness" (Kleinman, 1972), becoming aware of the body, listening to the body, and experiencing the body from within (Lord, 2002). This notion of physical education echoes what my research participants referred to as "being self" when learning EMDs. This is precisely what EMDs, as part of the curriculum, could easily bring to physical education.

EMDs are not "a new kid on the block": EMDs are not merely a new type of activities, a new health promoter, a new stimulus for cultural awareness, or a philosophical type of movement that is expected to enhance the physical education for the sake of gaining equal status as cognitive education. The integration of EMDs in Western physical education curriculum whole-heartedly represents an urgent request from cross-cultural studies, postmodernism, globalization discourse, somatic education, reconceptualist curriculum thought, and curriculum innovation theory. Ultimately, EMDs, with the nature of focusing on the true "self" not the activity and treating the body as a subject not an object, could facilitate the achievement of holistically developing all dimensions of a truly healthy human being—the body, mind, and spirit unity. By this re-orientation and re-conceptualization of Western physical education curriculum, EMDs would uniquely not only improve physical education curriculum but also enrich the understanding of curriculum theorizing.

How Can EMDs be Integrated into Physical Education Curriculum?

General Ideas of Integrating EMDs in Physical Education Curriculum

All interviewees and many other participants in the present study expressed that they were willing to integrate EMDs into their physical education curriculum, especially at the secondary school level. EMDs were also deemed as necessary to be integrated into other subject curricula especially in health and social studies. It is not difficult to comprehend why the participants expressed their willingness to integrate EMDs into their physical education program. From the 3-layer understanding of participants' life, as indicated in findings, these participants 1) had successful and enjoyable experiences of physical activity in their early life, 2) wanted all of their students to develop an active healthy lifestyle, and 3) experienced and believed that EMDs as a new approach could assist the educational goal that they had for their students. Yet, most of them considered EMDs as part of a warm-up, cool-down, or transition between activities, because they worried about their students' attention spans. However, a few participants indicated that EMDs could be taught as a unit of activity.

Practically, through discussion with the participants in the present study, it seems that there are currently a number of appropriate ways to integrate EMDs into physical education program:

A. Firstly, teachers could attend EMD workshops offered in conferences and regular professional development days that are related to health and physical education. For example, those participants, after taking my EMD 1-hour workshop at the provincial health and physical education conference gained the necessary knowledge, skills, and confidence, to teach basic Qi Gong in physical education. Those who attended the 6-hour workshop that I provided expressed that they obtained sufficient knowledge, skills, and confidence to teach basic Tai Chi and Qi Gong.

B. Secondly, for those who do not have an opportunity to participate in any EMD workshops, they can watch an EMD teaching videotape and practice prior to teaching it as well as consulting the EMD teaching materials, or teachers can learn EMDs with their students together in physical education classes by following appropriate videos. Taking advantage of repetitions of teaching a number of classes and nature of physical education teachers (learning movement rapidly), teachers could go far ahead of students and provide instruction employing general principles of motor learning and development in learning EMDs. In this type of learning, students would experience their teachers as open-minded, amicable, and approachable; thereafter, they would learn EMDs in a friendly atmosphere. This approach has already been adopted by a few research participants.

C. Thirdly, sometimes a teacher could invite EMD instructors from the community to come in to teach EMDs without paying an honorarium, because almost all community providers are willing to promote EMDs in hopes of having interested persons eventually sign up. Even in sports, the rugby society significantly contributes to the popularity of rugby in schools as a result of their promotional efforts. This would be the strength of fastening school, family, and community resources together for lasting active living.

D. Fourthly, there are many students' parents or relatives who are practicing or even teaching EMDs since there is at least one EMD school in every 11,000-resident community in North America. In most cases, those parents or relatives would be willing to volunteer to teach in schools.

E. Lastly, teachers could attend community EMD schools to learn for their own benefit as well as for the purpose of integrating EMDs into their curriculum. However, financial and time issues would be involved. This would be one of the best ways since teachers could systematically learn EMDs in a considerably short period of time. In fact, a few teacher/consultant participants have taken at least one-year long EMD course in the community. They also found that it was much easier when learning other EMDs because the theoretical foundations among different EMDs were similar.

The participants utilized the term, "snowball" effect, when referring to the introduction of EMDs with open-minded teachers and schools. One participant stated,

> We should get some teachers/schools that are really interested, practice EMDs with students, and bring in media exposure. Then, other teachers/schools will take notice and say "I want to do that, too.... It looks good for the students and society." These schools become the "hotspots"

> for EMDs … and demonstrate really positive images with EMDs. Once people see the images and hear the stories, interest surges and this is the start to plant more seeds for EMDs.

Teacher/consultant participants had a comprehensible understanding of their students in school. They pointed out that teachers need a great rapport with their students in order to teach EMDs. No matter how great the available materials are, successful teaching always depends upon the specific teacher, the interpreter or message conveyer. Students, to a great extent, are influenced by "good" teachers and the teachers that they like. Then, teachers have to be cautious to take what one participant called, "a soft approach" (not to push, but friendly share). In addition, participants regard external support such as training in professional development opportunities, teaching manuals, and teaching videos as a necessity.

A few student teacher participants indicated that school students could learn EMDs within the community because the time allotted for physical education was limited. Yet, the majority of participants argued that any activities could be learned within the community. However, most children would not have an opportunity to experience EMDs in the community due to financial constraints, time, transportation, or parental concerns (Abernathy, 1995). In addition, we should bear in mind that public schools should function as a place to provide education for all children and youth. One teacher stated:

> We should expose them to EMDs at the school. That's when it goes into their head. Because many of them do not even know it is in the community. In addition, they try it in school where they feel safe. They

> are not intimated. But, if going to sign up for a yoga, Tai Chi, squash, or racquetball lesson in the community, sometimes, it is pretty intimating to those kids. Because, they do not know anything about EMDs or the people that they are going to study with. So, that is why we have a multi-activity program here in our school. Because I want to expose them to every single game or activity that the physical education teachers know here so that they can make their choices later. You want them to do lifelong activities when they are out of high schools. They may say, after finishing the high school, "I know how to play badminton and I know basic rules and skills. There is a club that shows on Tuesday and Thursday night in the community. I will sign up for it." They have to get onto a comfortable level. In terms of learning EMDs, if doing this new activity together, nobody knows much more than others. They all feel comfortable because their levels are all the same, even for the teacher. It is important for them to see me, as a teacher, learning it with them. It is OK to look silly if you think it looks silly. But, let's try.

One of the leaders of physical education curriculum in this province made a strong statement:

> People are not stopping that from happening into the school. But, it is more importantly to implement EMDs in physical education. Few teachers have been trained in that area. Again, it depends on teachers' expertise. Teaches have expertise in basketball, volleyball, track and field, and so on. They teach what they know. So, we need to get it [EMD] at the

> university level. Then, we get more filtration down into the whole school physical education area. You [the researcher] need to get on the "circuit" and speak at all teachers' conventions, all professional development, and all provincial physical education conferences. You need to be offering a lot of sessions there. In doing so, we can enhance teacher education so that they can take it back to their kids. And, you need to get that to a useable manner as well.

All participants identified the importance of having EMDs in physical education teacher education curriculum. Teachers believed that prospective teachers (university students in physical education teacher education programs) should have the knowledge of a variety of activities to benefit their cooperating teachers and their own future teaching. EMDs are unique because they are totally different from any other activities. Consultants also signaled that learning EMDs was a great means for student teachers to be open-minded and to break their traditional mode of teaching that they had been taught in their own schools, where only a few team sports were offered at the secondary level corresponding to the extracurricular sport season. Teachers also perceived university students as having the advantage of possessing unstructured minds allowing them to easily accept new things. Yet, the student teacher indicated in his journal that, through learning EMDs, he understood why people did EMDs and how people got to know their bodies and control themselves.

> I feel that it is very important to know one's self. EMDs are a great way to accomplish this. There were times in my life when I was "lost." But now I have learned the importance of the world around me. I am responsible for

> myself and no one else can change that. From teaching EMDs, I can instill in my future students that they all are important individuals no matter what anyone else says or anything happens. One of the most important things that I take from learning EMDs is that I am an individual and I control my destiny. Being able to control oneself is a very key tool for being a successful teacher.

Technically, student teachers can learn EMDs for their personal and professional awareness, knowledge, skills, and benefits through regular physical activity courses, campus recreational programs, private sectors, community services, and professional development workshops/conferences.

Through this present study, it is evident that participants, especially practicing teachers, attempted to innovate their programs by including new ideas in order to ensure "success for all students" and foster "adolescents' health and fitness" (Fullan, 2001, p. 24). But, it seemed that few of them could stop to think about what "change" really means at a personal level. Seeking deep meaning is central to educational change, and changes in understanding and belief are the foundation of obtaining durable reform (Fullan, 2001).

Contrary to some people's concern, integrating EMDs does not mean a replacement of the Western physical education curriculum, but rather it helps Westerners to rediscover the lost body-mind relationship. Accepting EMDs does not mean that people have to give up their exterior "self" (the self that drive people to be productive, to be target- or goal-oriented), but means that people are assisted in finding the lost inner self (the true self) and maintaining a balanced life. As many participants realized, merely being with an outside self (e.g., goal-oriented, go-go-go, or rush-rush-rush, higher-faster-stronger, and longing for self "identity") without a balanced inner "self," would contribute to an unhealthy practice, and eventually reach impasse, as a human being, as a culture, or as a curriculum.

The stages of re-orienting physical education curriculum by integrating EMDs would be to: 1) demonstrate the evidence of multiple benefits and have more teachers/schools interested in and accept EMDs to better achieve various curriculum outcomes (for example, enhancing cultural awareness and appreciation, motivating students' learning, providing more "tools" in the "toolbox," and gaining varied health advantages; 2) penetrate the superficial benefits of EMDs into attaining body-mind harmony; and 3) reconceptualize physical education through educating children and youth to develop a healthy body, mind, and spirit unity, the truly holistic "one" person. This is not a pure Eastern or Western way, but rather a hybridity, a new ideology stemming from benefiting both Eastern and Western thought.

Concerns, Challenges and Difficulties in Integrating EMDs in Physical Education Curriculum and How to Deal with Them

There are a number of concerns, challenges, and difficulties that have been identified in the present study. A discussion of these issues or themes will deepen the understanding of the tension between EMDs and physical education in curriculum studies.

EMD Teaching Qualifications

It appears that the participants' prevalent concern of integrating EMDs in physical education curriculum is about teaching qualifications, such as insufficient knowledge, skills, and experience of EMDs. Almost all participants pointed out the importance of providing qualified EMD instruction, either by themselves or external experts. There might be two reasons that drove them to reach this tentative understanding of EMDs:

A. EMDs have a deep philosophical basis that encourages the learner to realize that movement acquired without having a sound understanding of the theory is meaningless (Jiang, 1995). Many participants realized that the more they learned about EMDs, the more they needed to learn. It is interesting that this endless learning does not result in frustration but a motivation for further learning in pursuit of EMDs.

B. Unlike the repetition required for achieving a goal in Western physical activities, success in learning EMDs comes from repetitions aimed at improvement during the process of the movement (Lu & Yuan, 1991). As such, the participants and even their students were encouraged to refine their movements through abundant repetitions and boredom did not occur. On the contrary, some of them requested to have more repetitions during learning. Evidently, EMDs for them became personalized and internalized. In other words, they were intrinsically motivated to reach their own EMD levels to their own satisfaction.

Personally, as a teacher educator and EMD instructor, I have successfully taught both theory and movement of EMDs at nearly all grade levels in schools. Based on my teaching experience in schools and other various locations, I have developed an EMD teaching philosophy, content (theory and movement), and instructional methods appropriate for Western student teachers and practicing teachers. Generally speaking, EMDs should not be taught in a totally orientalized way, especially at the beginning, because Westerners do not have the necessary daily life basis or cultural environment, and EMDs are not part of school mainstream curriculum. In other words, it has been "Westernized," to a certain extent, in order to allow them to start comfortably. I have discovered that the more Westerners know EMDs, the more they want to know authentic or original EMDs and the less they feel comfortable with "Westernized" EMDs. In terms of teaching content, there is no way for Westerners to master Tai Chi Form 24 (Simplified Tai Chi), the basic Tai Chi in the East. Therefore, I simplified it into Form 12, Form 6, and Form 4 to allow everyone at any skill and ability level to be able to learn and benefit from Tai Chi. I also employed similar adaptations for teaching Qi Gong.

Through my lived experience in the West in the past six years, my EMD teaching philosophy has eventually been formularized: "Anyone who can walk, stand, or sit can learn and benefit from Tai Chi; anyone who is alive (even those confined to lying in bed) can learn and benefit from Qi Gong." This is probably why the EMDs that I introduced have been fully accepted by all kinds of learners. In addition, this EMD teaching philosophy concurs with reconceptualist curriculum theories and the new trend of curriculum development in physical education: allowing all children and youth to be involved and to enjoy physical education in order to lead an active and healthy lifestyle in a historical, political, and cultural context.

For student teachers and practicing teachers, I have developed a 6-hour workshop that emphasized the core of EMDs while involving compromise and negotiation between different cultures in order to fit into Western education circumstances. This 6-hour EMD workshop can be conducted within a day or over several days. During the workshop, Tai Chi and Qi Gong were introduced, representing Eastern martial arts and Eastern meditation respectively. Written test and skills exam were administered with a friendly undertone for the purpose of non-stressful learning. As a result of the systematical learning in the EMD workshop, participants were rewarded with a certificate that acknowledged their achievement and teaching qualifications. Admittedly, the certificate represented a Westernized idea inspired by the success of traditional Chinese medicine such as acupuncture programs in the West.

Implementing the "certificate" idea recognizes the basic knowledge in EMDs that is necessary to be mastered, motivates students' EMD learning, and improves the quality of teaching EMDs. There were a total of 18 participants, 10 student teachers and 8 practicing teachers/consultants who received the Tai Chi and Qi Gong certificate at the end of the EMD workshop. This also implied that the research benefited not only the researcher but also the participants. Yet, the participants were all informed that the true learning of EMDs was never-ending and that the teaching certificate was merely a symbol or a reminder of the need for continuous learning. The quantitative results of the study indicated that learners could master the basic EMD theory and movement in a limited period of time with sufficient confidence in order to teach EMDs. Specifically, the confidence in student teachers without pre-EMD experience in the experimental group exhibited the most significant change. In contrast, the total 6-hour EMD learning did not make significant changes in terms of the confidence for student teachers with pre-EMD experience in the experimental group.

Although partial success has been in reconciling the tension between EMDs and Western physical education curriculum, there are some issues that need further discussion in terms of integrating EMDs in Western physical education curriculum:

A. The way of thinking in learning and teaching EMDs is different from a Western approach.

An Eastern way of thinking emphasizes intuition, comprehension, and understanding. Learning in Eastern culture entails image, perception, feeling, and sensitivity in order to achieve understanding, which is also characteristic of cultural thinking patterns in EMDs (Xu, 1996). This indicates that "EMD forms and skills can be taught. But, the artistic conception, the spirit, and the essence or the true meaning of the Dao in EMDs can only be felt or comprehend beyond description" (Xu, 1996, p. 61). It is only the learner that can employ his/her intuition to grasp, comprehend, and experience. At a certain level, it is common that people can feel but cannot really explain what is going on. This is precisely what some of the participants experienced:

> I sit down and do modified hamstring or I do something that was yoga based, which is targeting exactly the same muscle group. Wow, I feel it is different. Something is different. Because I can feel it. It was just the sensation that you're left with, which is physically different. But I do not know how to describe it. My flexibility improved more with less discomfort by taking yoga approach in terms of doing stretching stuff.

It is similar to what Lao Zi states, "Those who know much speak little; those who speak know little" (Yang, 1987, p. 133). Therefore, it would be absurd and impossible to assess a real EMD master teachers' level using the Western concept of "black belt."

B. There is no shortcut or fast pace in learning EMDs.

Learning EMDs requires patience by following one's individual natural pace.

Eastern approach focuses more on "process"—the practice or learning itself, not the "goal"—the product (Yang, 1996). Tai Chi in English is the equivalent to Tai Ji Quan (太极拳) in Chinese. "Tai Ji" (太极) in Chinese refers to a process of achieving "Wu Ji" (无极). "无极而太极" means that the very end in learning is to find endlessness. There is no end in pursuing any Eastern cultural activity including EMDs. Therefore, setting a goal in learning EMDs would be meaningless. Unfortunately, many Westerners prefer and believe that EMDs can be mastered quickly at their will. This is what is precisely described in a Chinese proverb, "To hasten the growth of the shoots by pulling them upward" only results in slowing down or jeopardizing the natural progress.

C. Learning EMDs is a personalized internal journey.

Learning EMDs is only for self and with self. It would be inappropriate to compare one person with others using objective criteria. Everybody is different in terms of body shape, mindset, experience, and the understanding of life. EMDs are an exceedingly personalized activity. It is likely for only the individual to speak for his/herself in terms of what is going on during practice. Everyone should feel comfortable in learning and practicing at his/her level. The best EMD is the one that benefits the specific person. In addition, 形神兼修 (cultivating both body and spirit) or 内外兼修 (cultivating both inside and outside) indicates the importance of cultivating inside spirit and outside body. 形 (xing) means "body" and 神 (shen) means "spirit" or "mind;" 内 means "inside" and 外 means "outside;" 兼 refers to "both" and 修 refers to "cultivate." This idea is the extension of the body-mind integration discussed earlier. In traditional EMD learning, it is essential to master the physical movement and skills, but it also exceptionally crucial to train the mind or spirit by cultivating Qi. Without the spirit component of EMDs, the physical movement becomes futile. The integration of strength, Qi, mind, and spirit is probably a unique approach in many kinds of "physical" activities (Jiang, 1995; Xu, 1996).

D. Learning EMDs is not merely for improving performance level, but for every aspect of life.

A few participants identified that people in the West tended to separate their EMD learning from their daily life. In the East, EMD practitioners, no matter whether they are novices or masters, regard learning or practicing EMDs as a process of cultivating one's mind or moral character. This is what is called 內外兼修 cultivating (修) both (兼) inside (內) and outside (外). "Inside" refers to morals; "outside" refers to skills (Martial Art Administration Center of State Department of Physical activity, Sport, and Recreation, 1998; Xu, 1996). Tai Chi master Lu-Tang Sun points out that the Qi hiding inside is De (德) and Qi showing outside Qi is Dao (道). That is why people who learned EMDs demonstrate morals such as respect, self-control, and being disciplined. Good morals enhance one's EMD learning, which probably offers a unique perspective that differs from many other "physical" activities. Morals in Chinese refer to harmony. Good morals would stabilize one's emotion that critically affects one's body as discussed earlier. In addition, Qi can flow to integrate body-mind into harmony. EMDs regard harmony within self as Zhen (真), harmony between self and others as Shan (善), and harmony between self and the universe as Mei (美). The concept of "harmony" is the highest principle in EMD ethical thought (Xu, 1996). It is obvious that EMDs have been greatly affected by schools of Confucianism, Buddhism, Daoism, military studies, and Yin-Yang studies (Kauz, 1977; Zhang, 1997; Xu, 1996).

Discussion of the issues raised by the participants could deepen our understanding of "teaching qualifications." Teaching qualifications can also be considered as an assessment issue. Indeed, it is difficult to assess one's qualifications of teaching EMDs in both the East and the West. In the East, Western certification ideas have been employed to standardize the quality of EMD instructors. Yet, can we adopt traditional Eastern thought to find a compromised way to affirm the instructor's qualifications? Without a doubt, we are facing both difficulties and opportunities in the procedure of integrating EMDs in the Western physical education curriculum. From theoretical and practical perspectives, it seems that we could reach a compromise, to a certain extent, between the nature of EMDs and contemporary physical education curriculum and practice.

EMDs and Religion

A number of participants revealed that one of the primary concerns in the public eye such as the parental body was about religious overtones in EMDs, especially Eastern meditation practice (yoga and Qi Gong). There were more teachers/consultants than student teachers who expressed this concern, which may result from practicing teachers' lives and working experience. Although most participants did not view religion as an issue in learning EMDs, those who did not receive systematical instruction in EMDs did not have a clear idea of this issue and could not respond to it. A few participants encountered parental concerns of a religious nature. One of the consultants received a few phone calls from parents when she was working at the provincial Ministry of Education. She recalled what happened:

> The phone call, from just outside the city, that I got was from a school district was that the Eastern philosophy was questioned in terms of some of the religious undertones. That came from a couple of parents, saying, "I do not want to my child to be exposed to this." They probably did not have a good understanding of it. Maybe, I do not have a good understanding of it, either. The decision that the school board made was that there would not be any more of EMD instruction in classes pending further review.

Many participants pointed out that this had to do with ignorance, close-mindedness, pre-conception, and stereotyped assumptions. "People feel frightened sometimes because they do not know or they have a pre-conception. If not addressed at the beginning, it [religion] will be an issue." However, some participants suggested that the explanation "EMDs are not a religion" should be avoided altogether as raising the issue might prompt parents to start thinking about it as a religion. As a researcher of cross-cultural study in curriculum, I think that it would be appropriate to face and overcome the difficulties through education rather than try to disregard them.

It is important to note that Eastern movement disciplines are rooted in Eastern philosophy, not religion (Martial Arts Administration Center of State Department of Physical Activity, Sport, and Recreation, 1998; O'Brien, 1978; Werner, 1977; Xu, 1996). Many EMDs, such as yoga and Qi Gong that originated 6000 years ago, have a longer history than any religions (Bi, Gu, Kuang, Liu, Lin, & Xiong, 1990; Guan, Zhang, Tan, Luo, & Zhao, 1996; Whaley, 1974; Xu, 1996). People in different areas such as philosophy, medicine, martial arts, and religion, have employed EMDs into their own systems. However, it is improper to say that EMDs are religious simply because religious people are practicing some EMDs. In addition, not only in the West, but also in the East, people mistake various schools of philosophy for different religions. For example, the Daoist school (道家) as a type of philosophy started in the Spring and Autumn Period (770CE—467CE); whereas Daoism (道教) as a form of religion originated in the Eastern Han Dynasty (25 BC—220BC) (Feng, 1992). Many EMDs that are greatly influenced by the Dao (道), such as Korean Taekwon**do** (跆拳道), Japanese Karate**do** (空手道), and Japanese Ju**do** (柔道), first derived from Daoist philosophy not Daoist religion. In addition, the three schools of philosophy and religion are interwoven and affect each other, which implies that there is no pure Daoist thought or Buddhist religion (Chinese Philosophy Unit of Philosophy Department of Beijing University, 2001).

Admittedly, religions have played a role in enriching Eastern philosophy and culture including EMDs. Some participants in the present study also saw how EMDs tend to get integrated with religion. Yet, hundreds of millions of Easterners who are practicing many EMDs that have religious undertones do not get obsessed by the theological facets but rather focus on the well-being benefit. In the West, Christianity has been the dominant religion. The participants suggested that some fundamental Christian parents believed that EMDs such as yoga and Qi Gong involved chanting and controlling people's breathing and mind. Therefore, as teachers, "we should not talk about learning a discipline using Eastern philosophy but only focus on doing physical exercise" in order to stay away from religious connotations. I think that it would be reasonable to start introducing EMDs in schools with this idea. However, without learning EMDs as a discipline at a philosophical level, it would be questionable whether learners could obtain the true understanding and benefits of EMDs.

Furthermore, as O'Brien (1978) argues, Christian tradition is not completely apart from Eastern tradition. He believes that a Christian can practice meditation and deepen his/her experience of prayer by following the path of Eastern inner union and still maintain his/her faith. He affirms that it is the dream that the Christian cherishes of returning to the state of purity, innocence, and virginity of the soul. "For a Christian, the techniques and philosophy of yoga are there as an invitation to foster his own peaceful perfecting of himself as God's image" (p. 2); because "yoga's interest lies in the study of human nature and its unfoldment [sic] from the primary perspective of consciousness" (p. 4). He also points out that a Christian will find that his/her efforts in learning yoga are complementary with many Christianized truths that assist him/her in spiritual growth.

Dechanet (1967/1975) also explains that the Christian may engage in yoga as an approach to re-establishing the connection between the body and the inner life. Dechanet discovers that many people in the West experience internal tension because they distrust their bodies. People consciously or subconsciously suspect that our physical nature is somehow an opponent to our spiritual nature, which results in disharmony, frustration, and alienation—a kind of "war" within ourselves. Dechanet further provides a unique way, Christian yoga, to harmonize all human desires physically, psychologically, intellectually, and spiritually, and to foster a whole human being. "'Christian' yoga is a yoga which helps one to carry out the programme of the Christian life. Hence it cannot afford to minimize authentic Christianity" (p. 161).

One of the participants argued that Westerners should not be paranoid about religious aspects of EMDs because students only learned EMDs for a few classes anyway. In addition,

> We are only going to give them the knowledge or the fact. We are not going to preach to them so that they have to behave in certain way or they have to change their believe. It would be just an experience for them. It is not up to us to make that decision for them. It's up to us, I think, to provide them with opportunity to experience something new.

A few participants expressed that "if I teach it in a class, there will be no religion aspect to it because it is not my religion." They also did not think that school administrators would be concerned about teachers' selection of EMDs as part of curriculum because they believed that the administrators usually treated teachers as professionals. They think that teachers know their respective disciplines. Some participants described the strategy that their schools were using to prevent problems: sending a letter that listed on- and off-campus activities with dates to parents to be signed at the beginning of each semester.

I also shared my experiences with the participants about a female high school student who believed that Tai Chi and Qi Gong were religious practices when I was teaching in her physical education class in a school right before interviewing her physical education teacher for my research. Some participants felt surprised and angry. "Some people are very over-paranoid about the religions aspect in there as opposed to it as a form of exercise." A few participants expressed that we were always going to get some people who interpreted things differently and "we always have the opposition, which is understandable. We have to prepare for that and we have to respect that. If people do not feel comfortable with things like dance or gymnastics, that is OK, too." Several participants also thought that the knowledge and confidence would be more important than violence or religion concerns. "It is not too difficult to overcome the religion concern, but it is difficult to introduce the idea that requires different ways of thinking" to those "redneck" and narrow-minded people.

From interactions with the participants, I have been aware that more and more Westerners are becoming eclectic in terms of their faith. In fact, it would be interesting and beneficial for Westerners to know that the co-existence of different thoughts and religions did not confuse but benefited Easterners. There has been never a religious war among different religions in the Far East. It is amazing to see that many individual Chinese profit from various religions, including Buddhism, Confucianism, Daoism, Islamism, and Christianity. Park (1996) observes:

> As an imported religion, Buddhism entered Chinese not as a displacer of what was already there, but as a partner in an enlarged enterprise. Chinese religious openness in this respect is without parallel in the history of the major religions.... With the arm of harmony and relatedness, the Chinese attempt to embrace the truth of another rather than to fight it. (p. 105)

One student teacher participant scrutinized the religious issue of EMDs from a historical viewpoint:

> A lot of things that we are teaching in the west are with the "truth" or we believe that there is one truth whether through our economics or laws, etc. Kids incorporate these in themselves. The truth to me is that there is no absolute truth. I am thinking in our teaching right now that we are trying

> to teach truth starting from children. We teach them science is the truth. But we have to realize that, in the past, those that were the truth are not truths. Other people believe other things and truth is always changing. There may be some truths, but in the future, we find that those are not truths any more.

This precisely echoes what Park (1996) affirms, "To the Chinese consciousness, human ultimate task is not to choose a religion but to undo the invisible walls between religions by finding a truth which is not confining because it is not finite" (p. 124). He continues with the following statement as the conclusion of the section of "Chinese religions and the religion of China" in his East-West discourse:

> The goal, however, is not a possession of Chinese religions but truth itself. In this sense, non-duality stops being non-dual as soon as anyone claims it. The human task, then, is not to champion the truth as expounded by a particular religion but to seek for one's true self through whatever religious structure is most natural to oneself. Out of the search of one's true self is born all that is true, all that is beautiful and all that is wholly good. (p. 124)

Indeed, fear and rejection result from ignorance and narrow-mindedness. Education plays a central role in overcoming the "religion" hurdle for integrating EMDs in Western physical education curriculum. Fortunately, there have been more and more physical educators that are becoming open-minded in response to a changing society. It is hoped that people could share, benefit, and enjoy differences regardless of religion. Then, EMDs as well as any other movement disciplines would find few hurdles to overcome.

EMDs and Violence

There were a few participants who worried about potential violence in and outside school arising from integrating Eastern martial arts. The participants stated that some parents also questioned education administrations on why martial arts were being taught in schools. Two reasons may be responsible for this concern: *ignorance* resulting from the lack of knowledge of the nature of Eastern martial arts and ***misunderstanding*** due to misleading representations of the Westernized martial arts through commercialized media. Ignorance can be the recipe for misunderstanding and misconception.

"Language analysis and etymological sources can help us orient to the semantic variations and the meanings of possible human experiences…" (van Manen, 2002, p. 270). Etymologically, "martial" refers to "warlike;" "art" relates with "skill" (Klein, 1971). "Martial arts" can be interpreted as combative techniques. Yet, Eastern martial arts (EMDs) are not just combative techniques, but also a type of culture and a representation of Eastern philosophy. Most Eastern martial arts originated in China (Theeboom & De Knop, 1999) and draw heavily upon Chinese philosophy (Johnson & Brown, 2000; Kauz, 1977).

Eastern martial arts have been significantly configured by the three major Chinese schools of philosophy, Daoism, Confucianism, and Buddhism (Xu, 1996). Since having greatly influenced Eastern society, Confucianism has also been centered in Eastern martial arts in terms of ethical judgment and value orientation. The core of Confucianism is "Ren" (仁), which automatically becomes the central spirituality of "martial morals" or "martial virtues" ("Wu De" or 武德). "Ren" can be interpreted as "love", which suggests handling all human relationships using benevolence, kindheartedness, humanity, honesty, tolerance, forbearance, modesty, friendliness, gentleness, politeness, sincerity, and love. All masters in Eastern martial arts are familiar with the saying "there are no martial arts without martial virtues" (Jiang, 1995, p. 64). The master would rather let his/her martial arts become extinct than teach a person without virtues.

All martial arts teaching documents start with expounding martial virtues (Wu De). In the situation of conducting martial arts, "martial virtues" require "Ren" first. Combat is the very last choice. When combat undesirably occurs, martial artists should only subdue the opponent and avoid harm, injury, or fatality. Some influential martial arts branches have specific rules for body parts that can and cannot be attacked. Confucian thought departs from "Ren" and brings combat into "Li" (礼), a conceptual system of courtesy, etiquette, and norms. Confucius himself discourages competitions; in the case of competition, it should be normalized by "Li" with the emphasis of "Ren" (Xu, 1996).

The "Ren" ethical thought in Eastern martial arts is fundamentally the manifestation of the "pan-harmonious ethical thought" (Xu, 1996). The "Pan-harmonious ethical thought" refers to the value judgment and pursuit of the universe, nature, and human being formed since ancient times" (Xu, 1996, p. 93). The core of the judgment and pursuit is "harmony" (和) that is valued as the most, because as Lao Zi claims, "All things bear the negative represented by YING [YIN] and face the positive represented by YANG; these two mingled in balance and created harmony" (Yang, 1987, p. 105). Confucianism regards "harmony" as the root of birth and development of everything in nature. Western physical activities derived from Ancient Greek culture emphasize competition and seek personal value or identity through comparison. In contrast, EMDs pursue harmony among self (e.g., between body parts, organs, body-mind), harmony between self and others, and harmony between self and the universe (Lu & Yuan, 1991).

Eastern martial arts have multiple values including combat, self-cultivation, health preservation, education, and recreation. "Harmony" is an ethical concept that approaches those values and provides a criterion to justify those values (Xu, 1996). A fundamental concept of Chinese philosophy is the "universe-human oneness" (天人合一). The "universe-human oneness" reveals that 1) the universe and human are originally one thing, and 2) the lofty ideal or ultimate goal for human is consciously to reach the "universe-human oneness" realm where there is no difference between self and anything else and no separation between inside and outside (Jiang, 1995). For martial arts practitioners, to achieve the "universe-human oneness" is to access the oneness of Dao (the origin of the universe), martial arts, harmony, and one's heart (Jiang, 1995).

In Eastern culture, there are many ways, including calligraphy, painting, music, cooking, poetry, meditation, and martial arts, to approach Dao (Kauz, 1977; Lu & Yuan, 1991). Literally, Dao (道) is the same Chinese character as "Way"—reaching the great understanding of the universe, nature, and self, which is also recognized by some Westerners (Brown & Johnson, 2000). In addition to the influence of Confucianism and Daoism, Buddhist spirituality, doctrine, and canon have a great impact on Eastern martial arts, for example, liberating all living beings, having mercy/benevolence at heart, and commandments. Shao Lin Buddhist temple has become a synonymous with most influential martial arts in the East. Representing the Ren thought in martial virtues, many Shao Lin martial arts masters stress employing virtues (De), not combative techniques or skills, to overpower and convince the opponents. The founder of the military school of thought, Sun Zi, actually shares the same way of thinking: "It is best to overpower the opponents without fighting" (Xu, 1996).

As detailed previously, EMDs entail practitioners to cultivate both inside morals and outside skills. Different from many physical activities and sports, Eastern martial arts have placed "martial virtues" as the top priority (Lu & Yuan, 1991). Eastern martial artists believe that practicing martial arts is the same process of cultivation or seeking for Dao. Learning martial arts is the crucial avenue and method of improving moral character. The ethical concept of Eastern martial arts is also employed to regulate martial artists' actions and behavior in all aspects of life. There are a total of three types of martial arts ethical documents that have been identified through history: 1) reminders and regulations for masters; 2) prompts and warnings to students; and 3) strict commandments, regulations, and taboos. Morals are considered as a pre-requisite of learning martial arts (Xu, 1996). Many martial arts schools have explicit regulations for not accepting students who have certain undesirable moral problems such as ambitious social destruction, aggressiveness, addiction to alcohol, flaunting, seeking only for making profit, lack of diligence, and deficiency in loyalty and filial piety. Eastern martial arts schools demands that students are respectful, self-controlled, self-responsible, and modest, and that they live a simple and frugal life (Kauz, 1977).

Many Western scholars also appreciate the genuine meaning of Eastern martial arts and Eastern "martial virtues." Brown and Johnson (2000) analyze the embodiment of non-violent disposition in Eastern martial arts by examining Lao Zi's Wu Wei (无为). Kauz (1977) explains that Wu Wei is reflected in many martial arts training by not resisting an opponent's attack, but rather tactically inducing him/her to lose balance. Back and Kim (1984) discover that EMDs are taught differently in the East and the West: elements indigenous to EMD (Taekwondo) such as spiritual development (Zen teachings) and awareness of cultural origin are ignored by many Westerner practitioners and replaced with full contact training and the focal point of "winning"—Westernized Eastern martial arts. Brawdy (2001) promotes human kindness and peace education through the pedagogy of Aikido. Min (1979) finds that Eastern martial arts stress the five S's, self-discipline, self-training, self-control, self-confidence, and self-respect when providing self-defense. An influential journal in the area of physical education and sport in the West, the Journal of Physical Education, Recreation, and Dance (JOPERD), discussed the question "Should martial arts be taught in physical education classes?" in the issue of November/December 2000. In this forum, there are eight proponents (professors, graduate students, and martial arts instructors) and two opponents (undergraduate students) of martial arts in school physical education programs. The two opponents express their major concern of potential violence or discipline problems from introducing martial arts. Yet, the proponents argue that numerous studies demonstrate that traditional martial arts are associated with decreases, not increases, in aggression or violence, in addition to a number of physical, psychological, and social benefits of martial arts.

In the meantime, educators and other professionals have proposed the inclusion of self-defense as part of school curriculum in the West (Carleton & Chen, 1999; Morningstar, 1991; Reilly & Friesen, 2001; Taylor, 1997). In the United States, almost one million youths aged 12 to 19 become victims of crime and about 3 million violent crimes and thefts occur at school each year (Bosch, 1997). Carleton and Chen (1999) argue that "the unique contributions of physical and motor skill development within the school curriculum provided by physical education identifies these classes as the logical place for developing and teaching a self-defense unit" (p. 33). Currently, a self-defense unit usually integrates a variety of martial arts that provide multiple benefits (e.g., health, calmness, cultural awareness, self-esteem, self-control, fitness, self-confidence, concentration, and gender equity) for students, especially for female and physically disadvantaged students, in addition to learning self-defense skills and strategies (Kwak, 1997; Morningstar, 1991; Reilly & Friesen, 2001).

The participants in the present study contended that parents were concerned much less about EMDs in helping their children learn how to defend and protect themselves than about "religious" connotations in EMDs. A few participants were worried about violence that may occur in and outside school if martial arts were included in school curriculum. Learning martial arts also help at-risk children and youth because of the core of Eastern martial arts, "martial virtue," or martial education (one of the values of martial arts), which has been also supported by a number of studies (Berry, 1991; Demoulin, 1987; Edelman, 1994; Glanz, 1994; Hellison, 1978; Twemlow & Sacco, 1998). Coincidentally, the participants in the present study observed that many students had positive changes in behavior due to learning EMDs. A student teacher recalled the phenomenon that she viewed during her practicum in a specialized school dealing with severe behaviors and learning disabilities,

> We had an individual to teach Karate to my grade 7's and the students that were least focused in physical education were the best to attend to this

> session. Their interest level was outstanding. I was amazed at the level of focus and discipline that the students had. It is an area that I will definitely explore with my class in the future.

In addition, anxiety and hyperactivity are major problems that inhibit school activity, for which many children and youth have been medicated. Martial arts that typically involve meditation can reduce these predicaments (Vockell & Kwak, 1990). Since teaching EMDs in the West, I have heard many stories regarding martial arts that were utilized to deal with violence as well. A number of children and youth who planned to access martial arts as a means of learning fighting techniques changed because "the first thing which a student who seriously studies the martial arts discovers is that they involve an enormous amount of discipline and hard work" and "the second thing that is discovered is that far from turning one into an engine of destruction, oriental combative sports/arts develop self-control" (Min, 1979, p. 102). Some of the students who studied martial arts did not get bullied anymore, not because they used martial arts to protect themselves or frighten bullies with martial arts, but because the bullied students transformed themselves in terms of self-esteem, confidence, and appearance. As matter of fact, martial arts have been a compulsory subject taught at all grades in all schools in China where violence from learning martial arts is never an issue in physical education curriculum.

Many participants argued that Western sports were more violent than EMDs, for example, boxing, wrestling, hockey, rugby, and football. One participant stated,

> We play a lot more violent basketball, volleyball, etc. In volleyball, you hit the ball as hard as you can to somebody else. In basketball, football, or

> rugby, people give elbows, shoving, push, jump, and land on each other all the time.

A few participants identified that the violent nature of martial arts is mainly projected by the media, although the media has played a role in bringing in Eastern martial arts into the West. Students believe that learning martial arts enables them to flip a person over or beat up others on the street. As early as the 1970s, Min points out,

> Initial interest is perhaps not hard to account for since the blatant commercialization of these [martial] arts by magazines and the movie industry has had the effect of a massive advertising campaign. The resulting popular image of the martial arts, besides being ridiculously inaccurate, tends to appeal to people's violent and egotistical impulses. The martial arts expert is pictured in the mass media as a sort of superman who breaks bones with the greatest ease and who is continually confronted with situations in which it is (or so the entertainment industry would have us believe) morally right to do so. The martial artist depicted in films, however, belongs to fantasy rather than reality. (1979, p. 101)

Yet, as a participant discovered, things are changing slowly. It was not very long ago that girls were not allowed to be involved in wrestling as an activity in schools. Now, the participation by females in the inter-school wrestling program becomes relatively acceptable.

Some participants suggested that Eastern martial arts such as Judo or Karate not be called by their original names but be called "self-defense" in order to keep away from people's misconceptions. However, "self-defense" only represents defensive knowledge, strategies, and skills for successful self-protection. Eastern martial arts are the equivalent to Eastern philosophy, Eastern culture, well-being, discipline, and self-defense, which apparently have more meanings than merely self-defense.

It is evident that Eastern martial arts represent the Eastern philosophy of Dao that strives for the harmony of self with the universe as an ultimate goal. This is in opposition to the comparison or competition for the sake of self-realization or self-identity. Martial virtues, primarily rooted in the three schools of thought (i.e., Buddhism, Confucianism, and Daoism), allow practitioners to develop true human beings with love, sincerity, and self-discipline. Therefore, Eastern martial arts can produce harmony and reduce violence.

EMDs and Students

The issue of EMD teaching qualifications concerned both student teachers and practicing teachers the most, followed by students' unfavorable reactions to EMDs. The specific challenges for physical educators were how to motivate and engage students, how to maintain their focus on learning EMDs, and how to have students respect and not disturb other students' learning. Many of these types of concerns came from those who have not tried to integrate EMDs into their physical education. Some participants stated that learning EMDs would be difficult for elementary students because they were not developmentally ready yet, and for late junior high students because they tended to demonstrate a lack of interest in the majority of school subjects. Ignorance, unfamiliarity, close-mindedness, and peer pressure might be the impediments when students encounter EMDs. A teacher participant pointed out a student's culture standpoint:

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> People ridicule or fear of what they do not know. Students have a different culture as youngsters who have tremendous peer pressure. There are very few students who could really step outside of their social circle, saying, "I like it. I do not care what you guys say." When everyone has to do it, it allows him or her to enjoy it inside. They may say afterwards, "Boy, that is a neat class."

A student teacher participant discussed student's initial attitude based on his experience:

> We have to overcome the initial attitude against EMDs, because it is something new and something that most students have not tried before. I can see that there would be a lot of negative comments when introducing it. I think that would be the greatest difficulty. Once students put their initial attitude on the side and learning or doing EMDs becomes their part of routine in their classroom or gym, I think it would go quite well. Maybe, some kids would look forward to it. I think that to get it start would be the biggest difficulty.

Some other participants pointed out that EMDs such as Tai Chi were something that they were not accustomed to. For example, they were not used to the quiet and relaxed activities. Although students' initial negative attitudes can be obnoxious, teaching EMDs would be much easier once that attitude was overcome. Yet, one teacher participant cautioned that we had to distinguish between those students who were unwilling to participate and those who really had a particular issue; then, we could deal with the particular issue as it arose.

It would not be a surprise that Eastern meditation and these slow-motion martial arts such as Tai Chi may not be attractive to those physically advantaged male students, who prefer competitive and aggressive physical activities and quick-motion martial arts such as Taekwondo, Karate, and Kung Fu; whereas many physically disadvantaged and female students would react just the opposite. For example, EMDs such as Tai Chi and Eastern meditation tend to appeal to secondary school female students since they do not have to worry about messing up their hair and perspiring. Yet, when those male students said, "Tai Chi is for girls or for people who cannot be tough," they would not know how incorrect they were, because every movement in Tai Chi is associated with combative applications that could be utilized in an extremely powerful and rapid way paralleling any martial arts. In China, Tai Chi is taught without the combative implication because the majority of people are learning Tai Chi and many EMDs for the benefit of health. From my own personal experience of teaching EMDs in the West, I usually taught the combative aspect in Tai Chi only when certain learners could not understand how to do the movements properly after I tried to offer instruction in many different ways. This should be a learning, rather than a motivational, crux. There seems a need for further discussion about this issue.

Another teacher participant, who actually taught EMDs to some of his physical education classes, addressed peer pressure among students and long-term suggestions:

> I think students would enjoy EMDs if they gave an honest try. But they would not do so, not in front of their friends. That is a concern. It is a management issue. If we start EMDs early, for example from kindergarten on, they have been doing it all together. Then, just like anything else,

> nobody worries about playing basketball. Also, there are young and they do not want to show that they cannot do it. We get it with every sport or every activity.

However, a student teacher participant insightfully examined peer pressure among school students from a cultural perspective:

> People do not like to see differences, especially in Western culture; I think that we like everyone to be the same. Our education itself tries to teach everyone that they are equal—everyone is the same, everyone talks the same, and everyone has the same experiences. When you get activities like EMDs, we are saying that it is different for everyone. I think that children sometimes may have a hard time to experience that. Especially, in junior and senior high school, students want to be alike. When we tell them that everyone has to be different, do it at his or her own level, and find their own comfort, it would be difficult for a lot of them. It is unfortunate that they close themselves off because they do not want to be different.

An elementary generalist participant, who was also a physical education major, taught Qi Gong in her physical education classes. She insisted that martial arts only be introduced at high school level because elementary students' affective and cognitive aspects were not developmentally ready. However, numerous studies (Baron, 1998; Kim, 1998; Massey, 1998), as well as my own experience of teaching EMDs at all age levels in Western schools, indicate that teaching EMDs at elementary level seems unproblematic. Indeed, some EMD studies have been conducted among preschoolers

(Humphrey & Trotter, 1988; Piper, 1988). In addition, EMDs are especially beneficial for both elementary and secondary students with disabilities including severe behavior disabilities in adapted physical education and stress education (Corder, 1999; Crider & Klinger, 2000; Edelman, 1994; Glanz, 1994; Sumar, 1998; Twemlow & Sacco, 1998).

Stress has become an imperative issue in schools. Studies have demonstrated that learning/practicing EMDs is an effective way for coping with stress in schools (Gold, 1987; Piper, 1988; Trotter, 1998). A consultant expressed for school students with passion:

> Kids at all school levels are stressed out these days. They do not have an outlet for frustration. They don't take time to reflect. EMDs will allow them to explore that dimension in their lives. It is not an expensive activity. It can be done at any time and in any place. It doesn't require extensive skill levels to feel competent. It can be done with large groups, small, or individuals. It would appeal to both genders.

In contrast, a few participants disputed that students might not have a negative initial attitude towards EMDs, because "if you were doing with the kids something new and novel, kids loved it." This is in line with participants' responses about the benefits of having EMDs for school students in the questionnaires of both the student teacher and the practicing teachers/consultant participant groups. It seems that EMDs, as a new form of activities, have opportunities and face challenges in terms of students' reaction and acceptance. It would be logical to say that it depends upon the instructors' knowledge of EMDs (the *what*) as discussed under the "teaching qualifications" section earlier, and the way to present it (the *how*), as apparent in any subject.

Some participants encouraged establishing rapport with students and applying a "soft approach" (e.g., actively interacting with students, providing background theory/stories, and answering questions regarding EMDs) when teaching EMDs. A few student teacher participants taught EMDs such as Tai Chi, Qi Gong, and yoga during their practicum. One student teacher taught Tai Chi by starting with a motivational strategy with a soft approach in a mixed socio-economic class urban school setting:

> I was so nervous at first because I never taught EMDs and I even do not have enough experience of teaching physical education. I made a point to my students before I started teaching, "This is something that is different. You probably never see this before." I also tried to bring in examples, "Does anybody know anybody that does Tai Chi?" There was a couple of Asian kids said, "My mom or my uncle does this." Some kids in the class said, "Yeah, my neighbor on their lawn does it every Saturday morning." I said, "Yes, I saw my neighbor that was across street from me used to do it. I used to think it was crazy." Then, the kids started to focus. I said, "Well, in order to do this, everybody has to be quiet. If you do not like it, that is OK. Just sit out. But do not ruin anybody else." In two days Tai Chi, I never had any kids sitting out. They were quiet and they were focused. Some kids came back to me and asked, "Can we do Tai Chi again?" To me, this was ultimate compliment. It is a huge surprise.

Another student teacher's experience of teaching EMDs spoke much about the change through learning EMDs among school students. She taught 10-15 minutes of Tai Chi at the beginning and 10-15 minutes of yoga at the end in an 80-minute block for 5 blocks with Grade 10 students. The EMD session in the first day was a little longer (45 minutes) to allow time for explanation. The female students in her classes were not really athletic, not really getting into doing physical activities, and talking more about clothing. Here is what she experienced in teaching EMDs to her Grade 10 female physical education class during her practicum:

> At the first day, they were chatty and could not focus and follow the movement. But, when I actually got it going, I thought it was great. They really liked it. By the second day, they knew pretty much about yoga poses by names. They laughed when I told them "Repulse the Money" of Tai Chi in the first day. In the second day, they all said "We know Repulse the Money and we learned it yesterday." It was way easier to get them focus and move without chatting in the second day. They also knew they had to focus on and everyone knew that where concentration should be. Maybe, only one girl was chatty and everyone was kind "Sh, we try to do this." That was my biggest reward.
>
> Why did they change? I think they gained respect of the movement and the benefit. I got really good feedback next morning after first class: "Oh, we felt it very great. We had a great sleep." "I was able to focus on my home work." I think that the students learned to focus, relax, and prepare them for the rest of the day.

> Actually, after we did EMDs for a week, I wanted to test them out and see how they responded to it on Friday that was the last day. I asked them what they want to do, the girls said, "We want to do the yoga and relaxation again."

> My cooperating teacher worried about it and watched for the first a few days. Then, she asked, "Can I join in?" I think she really enjoyed it. I think it surprised her to see the girls so quiet and so focused. Because the girls usually are like "Yi…" But, when they came in now, everyone sat down. They knew what they supposed to do. "Oh, our teacher is going to do yoga today."

Nearly all participants tended to integrate EMDs as a warm-up, cool-down, or transitional activity, rather than as a unit, due to the limitation of the students' attention span. Yet, the most important thing for physical educators is to understand, employ, and integrate EMDs into every aspect of physical education program in order to benefit all students. Integrating EMDs in physical education does not merely mean to actually teach a type of EMDs because EMDs are not simply a type of physical activity as detailed previously. To a large extent, applying EMD philosophy and enlightening student to be a real human being is far more important than to solely teach students a number of physical activities for healthy active living. Here is an example of what a teacher participant experienced when he taught Grade 11 students in an overnight bicycle program in physical education using Zen philosophy that he learned in Aikido:

A truck usually takes us and our bikes and tent to somewhere from the school. We camp and do some things, and come back to school the next day. It is only two days and one night. This time, there were about 20 students on this trip. It was pouring rain all night. When we got up in the morning, the rain was still there. All the kids asked, "When is the bus coming to get us?" I said, "I do not know. Is a bus coming?" Students said, "We are not going to bike in this rain." Then, we sat down and spent two hours. I think that I approached it from Zen.

I said, "The rain is nothing. It is just there. If it is bad, it is bad in the mind. It is not bad out there. It is just there. What you make up is what it is. It is raining right now. If you think it is bad, then, you make it bad. Can we make it good? Can we say, 'Yeah, we are going to bike in that rain. We are going back home in that rain.'" I also helped them try to figure it out. "How many hours are you going to live in your life?" It is thousands, thousands, thousands of hours. I asked, "How long is it going to take us back home?" "Two hours." I said, "What is wrong with riding in the rain?" "Well, you get wet, cold, and miserable." I said, "If you think it miserable, it is miserable in your mind. However, the two hours practically is just a second in your life." In the end, they all agreed to go.

Some of them now came back and said, "That was the most important two hours that I ever spent in my life." It is in people's minds that judgments

> are made. I thought that it was very much an Eastern approach to the whole thing.

Two teacher participants noticed the change in students who tended to lose their spontaneity, had short attention span, were not disciplined, and found everything very restrictive. They were inclined to only do things for fun. A teacher questioned emotionally, "Kids will say that they are bored in a 15 minute recess. How can they be bored in 15 minutes?" This also has to do with the fact that every activity that students participate in nowadays is structured, uniformed, organized, and well-planned. Another teacher participant regretted, "Most of students would not know what to do if teachers let them have free play. I do not think that is going to change. It is going to become worse. I think it is really a bad thing, unfortunately." This precisely aligns with Smith's (1999a) critique of the most profound disease in Western pedagogy—activism:

> Children in today's classrooms have virtually no time to simply dream, wait, think, ponder, or learn to be still. There is so little opportunity to find one's original face, because every space is seen to require some sort of instructional intervention.... Ironically, such maiming arises precisely out of good intention and great earnestness. (p. 24)

Nandy (1987) claims that childhood is a culture that modernity seeks to disown or repress. Smith (1999b) condemns modernity for not being friendly to children because what is weak or not fully understood is considered as a problem to be dealt with. He promotes post-modern pedagogy that begins with a sense of the deep interconnectedness and conversational dance between child and adult.

He claims that post-modern pedagogy offers students hope by demonstrating the way of participation in the task of creating the future.

> Post-modern pedagogy is primarily the art of teaching students how to read, to understand not what texts mean in some fixed sense, but to learn to discern what is at work in the way in which meaning is achieved in them. In broadest terms, it is a matter of learning how to read one's own story in the context of the fuller cultural story. (Smith, 1999b, p. 124)

He affirms that Western activism, unlike Eastern quiescence and pacifism, is responsible for the negative consequences that it has inflicted on the world including environment, medicine, and education.

It would be entirely wrong if we only blamed or tried to resolve the problems arising from students. Fundamentally, it is educators, our society, our culture, and our history that give rise to the superficial "concerns, challenges, and difficulties." If we could not search deeply in the ocean of wisdom, we might always keep ourselves on the board of chasing endless shallow surfs along the beach. Let us review what David Kennedy (1993) states after examining traditions in a number of cultures in the world: The newborn child carries a message from the world where the resource of all wisdom is located and they forget just as soon as they are old enough to transmit it.

Summary

EMDs consist of values of philosophy, health, education, culture, and self-defense. EMDs, themselves, are facing the challenge of being Westernized or compromised during East-West interaction. The Eastern philosophy such as oneness that EMDs bring into the West can enhance both the theory and practice in Western physical education curriculum. By doing so, a reinterpretation of health and wellness from a non-Western approach can be conducted. The integration of EMDs into Western physical education curriculum can also enrich our cultural awareness, de-centralize Euro-American-centrism, and foster authentic multiculturalism. Cross-cultural theories, postmodernism, globalization discourse, reconceptualist curriculum theory, and somatic education have provided legitimate adjudication and justification for integrating EMDs in the West.

The participants in the present study, scholars in various disciplines, and the researcher have reached a congruent viewpoint that it is not only necessary but also urgent to integrate EMDs into Western physical education curriculum. There are multiple ways to integrate EMDs into current physical education curriculum. Yet, concerns, challenges, and difficulties such as teaching qualifications, violence, religion, and students' reactions with respect to EMDs are visible, largely due to the ignorance and misconceptions of EMDs in the West.

From the preceding discussion, it seems that the existing problem is generally less about the research question of "why should EMDs be integrated into physical education curriculum" than about the question of "how can EMDs be integrated into physical education curriculum." Participants were inclined to be more concerned about teaching qualifications than other topics such as religion, violence, and students. It appears that for the public, the most vital concerns about having EMDs as an integral component of school curriculum are about the issues of religion and violence; for physical educators, the most significant concern is teaching qualifications for instructing EMDs. Education plays a central role in overcoming these concerns, challenges, and difficulties. This type of education should include teaching student teachers, practicing teachers, consultants, school students, parents, administrators, and the public in general.

CHAPER 7: CONCULSION, SUGGESTION, AND REFLECTION

We should learn how to live with the world, rather than against it in the name of some unrealizable pure identity.

(David. G. Smith)

Conclusion

The findings in the present study are congruent with scholarship in the literature reviewed. East-West cross-cultural inquiry into curriculum theorizing and development is timely both theoretically and practically in the Western physical education in the postmodern era. It seems that participants in this study were concerned more about the research question of "how can EMDs be integrated into physical education curriculum" than "why should EMDs be integrated into physical education curriculum." This may result from the rapid change in Western society in terms of accepting Eastern culture. What this interest or acceptance brings to Easterners is partially to strengthen their confidence and self-esteem after being oppressed in the past for a few hundred years; and yet, there is still much left unknown due to the unexpected "overwhelming" appreciation from the West in the postcolonial era.

This current East-West study is not merely a response to the rapidly and increasingly social acceptance of EMDs in the West, but rather to an active involvement in the cross-cultural dialogue especially at the historical, theoretical, political, and philosophical levels. What the present research investigates is how different cultures interact in the area of curriculum studies and development in physical education.

Specifically, it aims to explore "why should, and how can, EMDs be integrated into Western physical education curriculum." This study does not tend to favor Western curriculum theorizing and development by integrating EMDs at the expense of losing the ancient core nature or value of EMDs. Rather, it attempts to encourage the penetration of EMDs into Western epistemology and seeks to generate a better understanding of curriculum theorizing and development in the context of cross-cultural interactions. In so doing, the education *through*, not *of*, the "physical" can be fostered and real multiculturalism in public schools can be cultivated, the "third space" for peaceful dialogues can be created, the cultural accommodation and appreciation, not assimilation, can be generated, and the horizons that different people possess can be shared.

It is unavoidable that we typically bring our own worldview when meeting other cultures; yet, we could embrace an alien frame of thought without necessarily losing our own one (Gadamer, 1994). Our own horizon as a preconception or prejudice could facilitate our understanding during this procedure, but it would become a hindrance when encountering a new horizon of other cultures. Then, the "third space" may take place as a cultural hybridity when horizons are fused or shared (Gadamer, 1994; Smith, 2002a). During the combat with modernity, postmodernism discards "grand narratives," de-centers Western monolithic authority, and invites the repressed and marginalized voices. Furthermore, postmodernism aligns itself with Eastern mentality that can be characterized as relational, ecological, modest, intuitive, interpretive, and mysterious. It is likely that the West will encounter more difficulties or problems if it continues to ignore or not to accommodate those long-time marginalized and oppressed cultures in the post-colonial age.

EMDs represent strong Eastern philosophy and culture with thousands of years of practice in a number of Eastern countries that include the understanding of the universe, nature, and human being, a totally different way of thinking from the Western counterparts. By integrating EMDs, physical education curriculum could be improved tremendously through re-constructing the configuration of health and wellness. Although the research in physical education has benefited school physical education programs, research in curriculum studies, especially the reconceptualist mode of curriculum theorizing, could make the field of physical education curriculum theorizing and development more fertile.

Integrating EMDs is not a process of presenting a superior Eastern culture or supplanting the power of its Western counterpart. Rather it benefits, re-orients, and reconceptualizes Western physical education curriculum in order to attain holistic wellness, achieve the body-mind harmony, and develop a true human being. In turn, EMDs can also be transformed in a hybridized space. Although ignorance, misconception, and stereotyped assumptions of EMDs still exist, the embracement of EMDs seems not to be easily obstructed because the impasse imbedded in Western culture has been identified: the crisis of identity and personal value through competition (Smith, 1999a). We are facing both opportunities and challenges in the procedure of integrating EMDs in Western physical education curriculum, through which compromise can be reached at theoretical and practical levels.

Singling out EMDs as a bridge of dialogue between the East and West is only a part of my research intention. Integrating EMDs into Western physical education curriculum is not merely a remedy for mediating the tension between students and curriculum or assisting the implementation of curriculum in schools, but an alarm to awaken the sleeping Western "teaching civilization" that has encountered the cultural deadlock during the past few hundred years (Nandy, 1987; Smith, 1999b; Tu, 2000). Integrating EMDs in the Western curriculum does not tend to demonstrate the ancient wisdom and arts from the East or fight for nestling the marginalized cultures, but rather calls for a cultural pluralism and multiple polarities in the postcolonial epoch. Integrating EMDs provides an example of cross-cultural coexistence between Western culture and the remaining historically oppressed cultures. It also offers an arena where all different cultures can perform and in which differences can be made aware, tolerated, understood, benefited, and enjoyed. Old Eurocentric nightmares should not be placed by insurgence of the isolated cultures, but rather by seeking for a shared horizon and formulating the harmony—the Dao.

Suggestions for Future Research

East-West interactions have been proceeding for thousands of years, yet it seems to become urgent in cross-cultural studies. The increasing interest in EMDs in the West presents both an opportunity and a challenge for future research in the area of physical education curriculum theorizing and development. My doctoral research suggests the possibility of undertaking further inquiry into this multicultural understanding of curriculum studies. The following suggestions emerge from the present study for the considerations in future research.

A. Exploring relationship and interaction between Christianity and EMDs

It seems that religion, especially fundamentalist Christianity, is one of the most influential factors when encountering EMDs in the West. The majority of the participants in the present study were Christians, some of who were interested in EMDs with certain reservations or who embraced EMDs completely. More theoretical understanding could be enriched by exploring Western religions, for example, historical and contemporary Christianity and their changes in the postmodern era.

B. Deepening an understanding of curriculum theories and somatic education in physical education

Physical education is part of education by its first nature. Curriculum theorizing and development in physical education should be fastened firmly to educational curriculum theory. The insufficiency of absorbing curriculum theories contributes to the unfruitful development of physical education. Little evidence of linkage has been identified between physical education and curriculum theorizing. In addition, somatic education, rooted in both Eastern and Western wisdom, may have the potential of replacing the name of "physical education," which, at this time, has not drawn full attention. Yet, somatic education itself needs to become more fully developed by examining EMDs more deeply.

C. Investigating the values of EMDs in the West and in the East

The values of EMDs such as philosophy, health (keeping fit and healing), education, culture, self-defense (combative art), recreation, and athletics have been generally recognized in the present study. Yet, there are different emphases on these values in

Eastern and Western contexts. For example, the values of philosophy and self-defense seem to be stressed more in the West than in the East, whereas the athletic and health values tend to be underlined in the East during this period of modernization. Cultural, sociological, and historical investigations are required in this type of study.

D. Examining students' views of EMDs and perceived benefits from integrated EMDs into physical education curriculum

All efforts made in educational research, whether in the area of teacher education or professional development of practicing teachers, are for the ultimate benefit of the student. Students' views, understandings, experiences, and benefits of learning EMDs should be one of the primary foci in future research through which teacher education in the university and practicing teacher professional development in schools could be improved accordingly. Age levels, ability/disability, and genders of students should be studied interdependently during the corresponding research on EMDs.

E. Studying parents' and school administrators' views of EMDs

Parental bodies play a significant role in determining the integration of EMDs in school curricula. The present study has discovered some potential problems with respect to parents' ignorance and misconceptions of EMDs. Although school administration was not identified as part of a concern in the implementation of EMDs in physical education curriculum, strong support obtained from school administrations would facilitate the integration of EMDs in school curriculum.

F. Inspecting/Inquiring into the relationship between integrating EMDs in curriculum and "hot" issues in contemporary implementation of physical education curriculum

During the present research, a few controversies have been raised regarding the conflict between the fundamentals of EMDs and current physical education issues. For example, it is well-known that specific heart rates have to be targeted when doing physical activities in order to be healthy and fit from a Western viewpoint; yet, strong Qi or Prana should be maintained and flow across the body freely as necessary for a healthy person from an Eastern perspective. The heart rate is not considered as important in comparison to a Western perspective. Consequently, assessment (a Western idea) would be problematic in the implementation of the curriculum that contains EMDs in the West. Thus, a negotiation or compromise may be needed between the two fundamentally different cultures when integrating EMDs in Western physical education curriculum.

G. Conducting multi-cultural inquiry beyond East-West studies

There has been pressing need for multi-cultural studies in physical education, in relation to not only East-West, but also West-Africa and West-South America. The present study serves as one of the initiatives for promoting multicultural studies in the area of physical education curriculum. The world, especially North America, becomes increasingly multi-culturalized with growing immigration and high-tech communications. Schools need more culturally sensitive curricula to meet demands for multiculturalism or cultural pluralism in the changing society.

H. Employing different research methods in EMDs studies

Generally speaking, qualitative, quantitative, and mixed (qualitative-quantitative) approaches should be considered in the area of physical education curriculum studies. Both qualitative and qualitative approaches have unique values and make significant contributions to educational research. They should not contradict but complement each other for the sake of benefiting education. The quantitative approach has dominated the research while qualitative research has been relatively innovative in physical education academia. Especially, interpretive inquiry, case study, phenomenology, ethnography, hermeneutics, critical theory, narrative inquiry, grounded theory, and autobiography should be widely employed in the research of physical education in order to enrich the understanding of EMDs in physical education curriculum.

Refection

When I was a child and youth, I was a long-distance runner. And I still enjoy watching marathons today. During my doctoral research, I felt myself reaching various stages physically, mentally, and emotionally. I have experienced my preparation training (identifying the research topic), qualifying performance (candidacy), initial stage (data collection when working with student teachers and practicing teacher/consultants), difficulty to breathe (data analysis), catching the second wind (writing through the chapters of data analysis and discussion), seeing the stadium from a distance (writing the last chapter), and adjusting and running the last lap in the stadium (editing, getting feedback, re-editing, and finalizing the dissertation). It is not only an intellectual, but also an emotional journey of examining what I encountered through this East-West dialogue.

Although I was educated and employed in the East, and immigrated to and worked in the West, I should say that I did not experience any cultural shock since I was well prepared prior to entering the West. However, I still experience enormous cross-cultural confusion, frustration, curiosity, and fascination.

I remember the episode when, after arriving in New York for a few months, I asked a Chinese-American professor on the way to attend a traditional Chinese New Year celebration: "Do you feel that you are a Chinese or an American?" "Well, it is hard to say," he responded. Now after living for a number of years in the West, I seem to understand it. I FEEL that I am a Chinese, a Canadian, and a world citizen. I also remember that it was difficult for me, and actually for many Chinese in Canada, to support one side when Beijing and Toronto competed for the hosting the 2008 Olympic Games. I felt proud and sad for both of them. I feel that I am starting to see things not from a purely Chinese or Canadian viewpoint, but from a wider vision, a third space, and a world perspective. I do not believe it to be right or wrong, better or worse, but I believe that the most important thing is that I am engaging in a cross-cultural dialogue and multicultural understanding for the benefit of peace.

My doctoral research on East-West dialogue is rather a recognition, accumulation, and reflection of my personal experiences and cross-cultural understandings through my almost forty-year life span. Like many other immigrants, at first I tended to become Canadianized even academically—to choose a topic that would sound entirely Western and have nothing to do with my origin. Fortunately, the department that houses my study has a tradition of appreciation for Eastern culture and for decades, has had scholars in virtually all of the interpretive human science disciplines as well as in globalization studies and intercultural dialogue. The professors, especially my doctoral committee members, identified the uniqueness that I owned to conduct an East-West study. Their encouragement and assistance led me to believe that my lived East-West experience, educational background, and privilege of teaching physical education and EMDs have naturally drawn my academic work into a variety of explorations of how Eastern wisdom traditions and predominant Western epistemologies can be engaged in creative dialogue, especially through the relationship of body and mind. Yet, sometimes I felt that it would be more comfortable for Westerners to critique and claim their debt to the rest of the world.

I preferred doing a theoretical and practical combined study because I strongly believe that theory and practice should and can complement each other. I persisted in reaching physical educators in the teaching field although I was aware of the difficulties to recruit participants, especially for this alien EMDs study. In so doing, I positioned myself as a learner and mediator between theory and practice, between scholars and practitioners, which prepares me for further theoretical and practical studies in my future ongoing professional development. My study of working with both student teachers and practicing teachers bridges the relation between teacher education and professional development of teachers. This has been identified and complimented by one of the participants (see the quotation on page 161).

The research on integrating EMDs in Western school curriculum is also a process of re-learning Eastern philosophy and movement disciplines for me. Through my doctoral research, my understanding of EMDs and teaching EMDs has also advanced in a truly hermeneutical spiral movement. When different cultures meet, there is never a pure "your or my way" of thinking, but rather a mixed or transformed understanding. It requires sensitive awareness of how new comprehension is attained through encounters with the horizons of other traditions. Although I was intellectually traveling back and forth between Eastern and Western thoughts and languages, it would not be appropriate to claim that I was utilizing "your" or "my" culture, but "our" cultures. "There is an inextricability of Self and Other, with the Other maintained as a kind of Other-for-the-Self" (Smith, 1999a).

I felt that I was so fortunate to do the type of research that allowed me to remain engaged in my routine practice of EMDs: I usually practiced Tai Chi or Qi Gong regularly while I thought about and wrote my dissertation, which enriched my understanding and improved my writing about Eastern movement disciplines. I would think that such opportunities rarely occur in many types of research. I also felt that writing seemed to have its own fluidity just like performing Tai Chi: I could not speed up or slow down at will, but followed instead the natural movement. This mirrors Denzin and Lincoln's (2003) description of many qualitative researchers who learn how to write differently by locating themselves in their own texts. I also realized that I frequently returned to the transcripts since they seemed to have more meaning than what I initially analyzed. The transcripts inspired and provided rich information for discussion and interpretation. I felt that I brought three parties, the participants, scholars in related area, and myself, into the balanced discussion space, rather than relying on my own voice. I acted as a quilt maker, a music improviser, and a bricoleur and frequently utilize montage in my writing work (Denzin & Lincoln, 2003). It is true, as Richardson (2003) expresses, that writing is not merely a mopping up activity at the end of a research project, but rather a method of inquiry, discovery, and analysis. It is a way of finding out about myself and my research. "By writing in different ways, we discover new aspects of our topic and our relationship to it. Form and content are inseparable" (Richardson, 2003, p. 499).

One memory that stands out is when I taught Tai Chi and Qi Gong in a Grade 10 physical education class prior to interviewing the physical education teacher for my doctoral research. After learning Tai Chi for a few minutes, one of the female students asked the teacher for permission to phone her mother because she suspected that we were practicing religion. When she returned, she claimed that she and her mother both believed that what we were doing was related to a certain religion that was against her faith. Therefore, she requested to terminate her participation. The teacher was shocked by the female student's view, which later became a part of the inspiration for an interview that I conducted with the teacher. Although I was not surprised, it was the first time in six years of teaching EMDs in the West that the learner actually ceased to perform EMDs right in the middle of my EMD instruction. This incident has remained in my mind ever since and reminds me to question, "Why and how do different cultures (including religions) interact or encounter?"

I also remember one day when I taught 10-15 minutes of Qi Gong as an integrated course content into the APT-PE (physical education student teacher) class at the end of an outdoor pursuit activity. It was approximately 30 Celsius degrees below zero (minus 22 in Fahrenheit); it was bitterly cold. I asked the students whether or not they preferred to go back indoors to perform Qi Gong. They unanimously decided to stay outside to do it, which even does not occur in China because of the severe weather. What moved me was that the student teachers knew the true meaning of EMDs and pursued engagement with a great passion. Through my research, I was impressed that the integration of EMDs in physical education already took place in a number of schools in the large city where my research was situated in western Canada.

Eastern philosophy and movement disciplines do not only belong to Easterners. They are the crystalization of human wisdom that should penetrate all artificial borders. Many people observe that young children have no difficulties in accessing different people or different cultures, not only because they do not have pre-conceptions that confine their enjoyment, but also because the place from which they come is the source of wisdom. As Smith (1999a) suggests, we should and can accept all others in the way a very young child does: trusting the world and engaging ourselves in the only world without fear.

TABLES AND FIGURES

Tables

Table 1. Curriculum and teaching within modernist and postmodernism frames (Smith, n. d., P. 2).

Modernism	**Postmodernism**	**Curriculum/Teaching**
Definitional	Referential/analogical	From "this means that " to "this refers to that, is like that"
Hierarchical	Relational	From winners/losers to a community of understanding
Specializationism (disintegrative)	Wholism (integrative)	From isolationism to desire (eros)
Alterity as a problem to be dealt with (xenophobia)	The Other opposes self identity to deepen it	Reflexive teaching (not just reflective)
Dualistic	Pluralistic	The play of meaning
Science and technology as grand narratives	Reformulation of "grands recites"	Colonialism, science and spirituality
Ego-logical	Ecological/ecumenical	Subject and object in reciprocal relation

Table 2. Sample of Inner Game Way of Learning (tennis)

	The usual way of learning	The inner game way of learning
Step 1	Criticize or judge past behavior	Observe, (nonjudgmentally), existing behavior
Step 2	Tell yourself to change, instructing with word commands repeatedly	Ask yourself to change, programming with image and feel
Step 3	Try hard; make yourself do it right	LET IT HAPPEN!
Step 4	Critical judgment about results leading to repetition of process.	Nonjudgmental, calm observation of the results leading to continuing observation of process until behavior is automatic.

Table 3. Contrasting characteristics of quantitative and qualitative research (Thomas and Nelson, 2001, p. 332)

Research components	**Qualitative**	**Quantitative**
Hypothesis	Inductive	Deductive
Sample	Purposive, small	Random, large
Setting	Natural, real world	Laboratory
Data gathering	Researcher is primary instrument	Objective instrumentation
Design	Flexible, may change	Determined in advance
Data analysis	Descriptive, interpretive	Statistical methods

Table 4. Contrasting characteristics of quantitative and qualitative research (McMillan and Schumacher, 1997)

	Qualitative	**Quantitative**
Research design	Ethnographic (participant observation, ethnographic interview, document and artifact analysis) and analytical (concept analysis, historical analysis, legal analysis)	Experimental (true experimental, quasi-experimental, single subject) and non-experimental (descriptive, correlational, survey
Data çollection techniques	Participant observation, ethnographic interview documents, artifacts, and relics	Structured observation, standardized interview, tests, questionnaires, unobstrusive measures
Reading research and evaluation	Introduction, methodology, findings and interpretation, conclusion	Abstract, introduction, research problem, review of literature, research hypothesis or question, methodology, results, discussion

Table 5. Profiles of participants

Groups	Number of participant	Average age (year-old)	Age Standard Deviation	Gender male / Female	People with Pre-EMD	Average pre-EMD experience (Month)	People who Still practice
APT Comparison group	30	24.4	2.97	18/12 (60% / 40%)	15 (50%)	8.54 (SD = 9.73	2 still practice, 2 occasionally (13%)
APT Experimental group	28	24.89	3.91	14/14 (50% / 50%)	10 (36%)	15.83 (SD = 23.07)	3 still practice, 2 occasionally (18%)
APT interviewees	10	24.3	3.06	5/5 (50% / 50%)	3 (30%)	10.33 (SD = 11.85)	2 still practice (20%)
PE teacher and consultant	12	43.25	8.45	4/8 (33% / 67%)	12 (100%)	7.36 (SD = 17)	1 still practice (0.8%)
Summary	Total 70	30.85	10.74	36 /34 (51% / 49%)	37	10.58 (SD = 4.59)	6 still practice, 4 occasionally (14%)

Note:

a. "Pre-EMD" meant that participants had previous EMD experiences prior to the present research.

b. "Total" did not include APT interviewees because they were part of the comparison and experimental groups.

Table 6. Pre-EMD that participants experienced

EMDs	All APT students	APT interviewees	PE teachers & consultants	Teacher educators (professors)	Total
Aikido			1		1
Judo	C2			2	4
Karate	C2+E2	E1		1	6
Kung Fu	C1+E1			1	3
Qi Gong	E1		8	3	12
Taekwondo	C1+E2		1		4
Tai Chi			12	4	16
Yoga	C11+E5	C1+E1	9	2	29
Total	C17+E11 =28	C1+E2=3	31	13	75

Note:

a. "C": comparison group;

b. "E": experimental group;

c. Number represents how many participants took that particular type of EMD that was taken.

Table 7. Descriptive and inferential statistics for PRE and POST measures of each item (variable) in the experimental group

Item	Time	Mean	Standard Deviation	df	t	Sig.
PE majors should learn EMDs	Pre	3.21	0.93	27	2.22	**0.018**
	Post	3.52	0.94			
PE minors should learn EMDs	Pre	3.07	0.95	27	2.16	**0.020**
	Post	3.35	1.04			
PE teachers should learn EMDs	Pre	2.90	0.92	26	1.96	**0.031**
	Post	3.15	0.89			
Confidence in teaching EMDs	Pre	1.71	1.27	28	7.78	**0.000**
	Post	3.71	0.60			

Table 8. Descriptive and inferential statistics for PRE and POST measures of each item (variables) in the experimental group without pre-EMD

Item	**Time**	**Mean**	**Standard Deviation**	**df**	**t**	**Sig.**
PE majors should learn EMDs	Pre	3.03	0.81	17	2.09	**0.026**
	Post	3.44	0.78			
PE minors should learn EMDs	Pre	2.81	0.93	17	2.01	**0.030**
	Post	3.22	1.00			
PE teachers should learn EMDs	Pre	2.50	0.92	17	3.01	**0.004**
	Post	3.06	0.80			
Confidence in teaching EMDs	Pre	1.00	0.00	17	17.26	**0.000**
	Post	3.72	0.67			

Table 9. Proportion of student teachers' response (score) to the items in the experimental group (n =28)

Item	**Strongly disagree (%)**	**Disagree (%)**	**Undecided (%)**	**Agree (%)**	**Strongly agree (%)**
PE majors should learn EMDs	Pre: 7 Post: 4	Pre: 7 Post: 7	Pre: 43 Post: 36	Pre: 39 Post: 39	Pre: 4 Post: 14
PE minors should learn EMDs	Pre: 7 Post: 7	Pre: 11 Post: 11	Pre: 32 Post: 46	Pre: 39 Post: 32	Pre: 11 Post: 4
Teachers should learn EMDs	Pre: 7 Post: 4	Pre: 18 Post: 14	Pre: 54 Post: 54	Pre: 18 Post: 21	Pre: 3 Post: 7
Confidence in teaching EMDs	Pre: 71 Post: 0	Pre: 7 Post: 0	Pre: 3 Post: 4	Pre: 4 Post: 14	Pre: 5 Post: 4

Table 10. Proportion of student teachers' response (score) to the items in the experimental group without pre-EMD (n =18)

Item	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree (%)	Strongly agree (%)
PE majors should learn EMDs	Pre: 6 Post: 0	Pre: 11 Post: 11	Pre: 55 Post: 39	Pre: 28 Post: 44	Pre: 0 Post: 6
PE minors should learn EMDs	Pre: 11 Post: 6	Pre: 17 Post: 17	Pre: 50 Post: 33	Pre: 22 Post: 38	Pre: 0 Post: 6
Teachers should learn EMDs	Pre: 17 Post: 0	Pre: 28 Post: 22	Pre: 44 Post: 55	Pre: 11 Post: 17	Pre: 0 Post: 6
Confidence in teaching EMDs	Pre: 0 Post: 0	Pre: 22 Post: 0	Pre: 55 Post: 39	Pre: 17 Post: 50	Pre: 6 Post: 11

Table 11. Proportion of student teachers' response (score) to the items in the comparison group (n = 30)

Item	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree (%)	Strongly agree (%)
PE majors should learn EMDs	Pre: 0 Post: 3	Pre: 13 Post: 13	Pre: 33 Post: 23	Pre: 47 Post: 48	Pre: 7 Post: 13
PE minors should learn EMDs	Pre: 3 Post: 3	Pre: 10 Post: 17	Pre: 37 Post: 27	Pre: 40 Post: 43	Pre: 10 Post: 10
Teachers should learn EMDs	Pre: 7 Post: 7	Pre: 13 Post: 20	Pre: 34 Post: 36	Pre: 33 Post: 30	Pre: 13 Post: 7
Confidence in teaching EMDs	Pre: 77 Post: 67	Pre: 10 Post: 10	Pre: 3 Post: 13	Pre: 7 Post: 7	Pre: 3 Post: 3

Table 12. Proportion of student teachers' response (score) to the items in the comparison group (n = 30)

Item	Strongly disagree (%)	Disagree (%)	Undecided (%)	Agree (%)	Strongly agree (%)
Student teachers should learn EMDs	Pre: 0 Post: 0	Pre: 0 Post: 0	Pre: 14 Post: 0	Pre: 43 Post: 57	Pre: 43 Post: 43
Teachers should learn EMDs	Pre: 0 Post: 0	Pre: 0 Post: 0	Pre: 0 Post: 0	Pre: 71 Post: 43	Pre: 29 Post: 57
I like to learn EMDs	Pre: 0 Post: 0	Pre: 0 Post: 0	Pre: 0 Post: 0	Pre: 57 Post: 57	Pre: 43 Post: 43

Table 13. Similar terms with respect to human body and health in Chinese and Sanskrit

	Life force or energy	Energy center	Energy channel	Exemplary practice form	Oppositional term
Chinese	Qi	Dan Tian	Jing Lou	Qi Gong	Yang-Yin
Sanskrit	Prana	Chakras	Nadis	Yoga	Yo-Ga

Table 14. Attributes and correspondences in the Five-element theory

	Wood	Fire	Earth	Metal	Water
Yin organs	*Liver*	*Heart*	*Spleen*	*Lung*	*Kidney*
Yang organs	Gallbladder	Small intestine	Stomach	Colon	Bladder
Emotions	*Anger*	*Joy*	*Sympathy*	*Grief*	*Fear*
Colors	Green	Red	Yellow	White	Black
Directions	East	South	Center	West	North
Seasons	Spring	Summer	Late summer	Fall	Winter
Climates	Wind	Heat	Humid	Dry	Cold
Tastes	Sour	Bitter	Sweet	Spicy	Salty
Senses	Sight	Taste	Touch	Smell	Hearing

Figures

Figure 1. Tai Chi symbol

Figure 2. Assigned journal writing with prompt questions pertaining to 3 layers

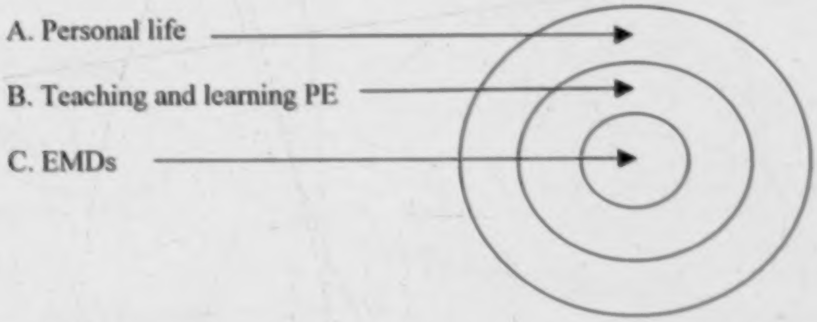

A. Personal life
B. Teaching and learning PE
C. EMDs

Figure 3. Means of four items in the experimental group

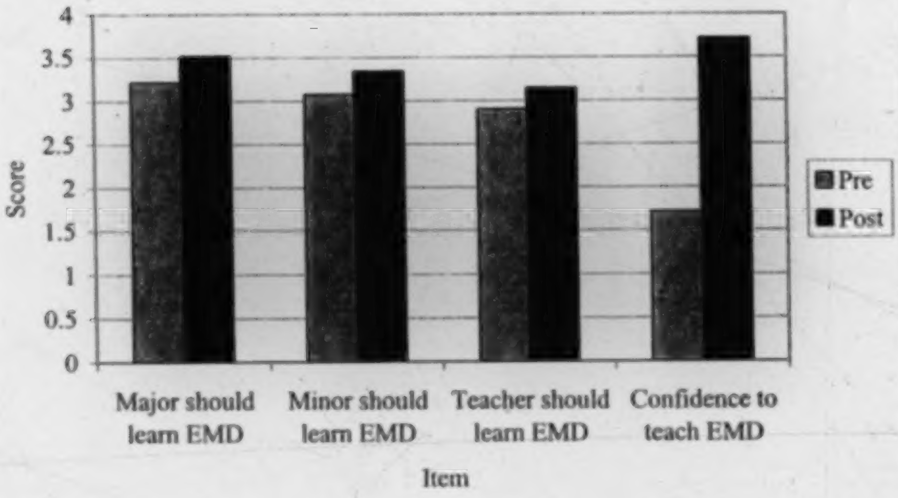


Figure 4. Means of four items in the experimental group without pre-EMD

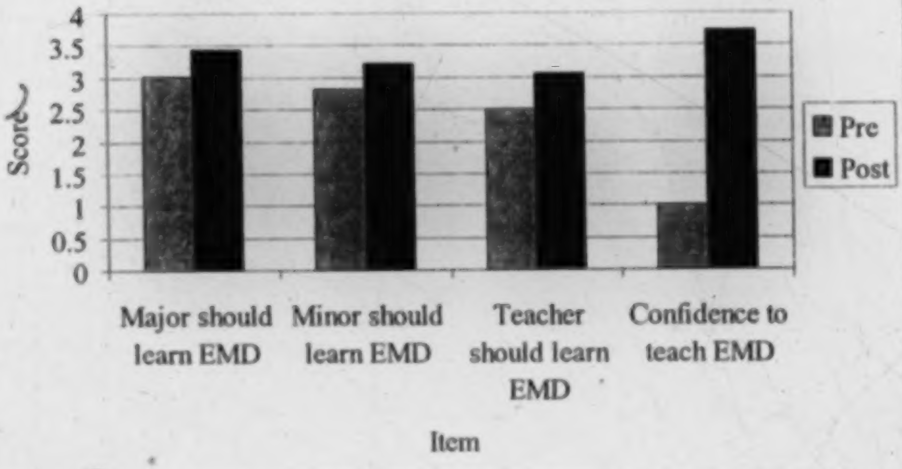


Figure 5. Frequency of responses to "PE majors should learn EMD" in the experimental group.

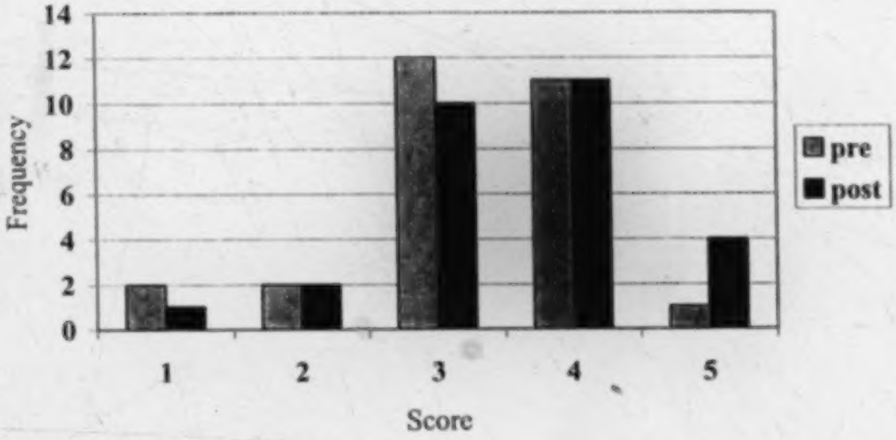


Figure 6. Frequency of responses to "PE minors should leran EMD" in the experimental group.

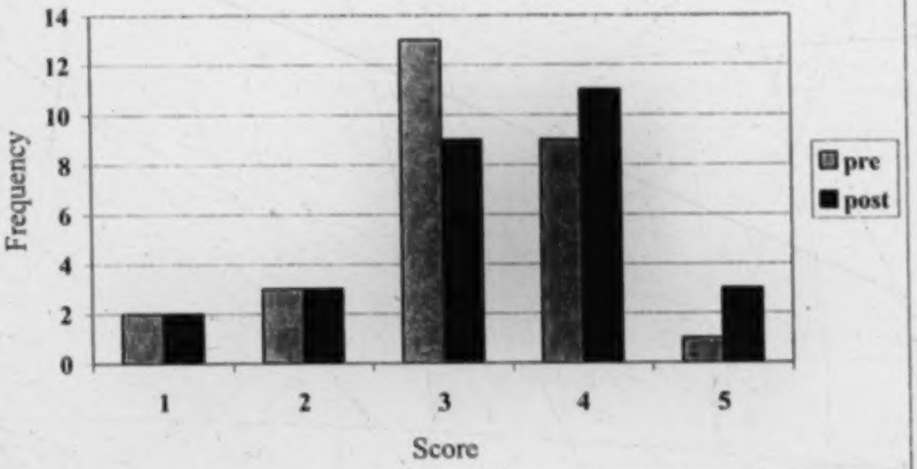


Figure 7. Frequency of responses to "PE Teachers should learn EMD" in the experimental group.

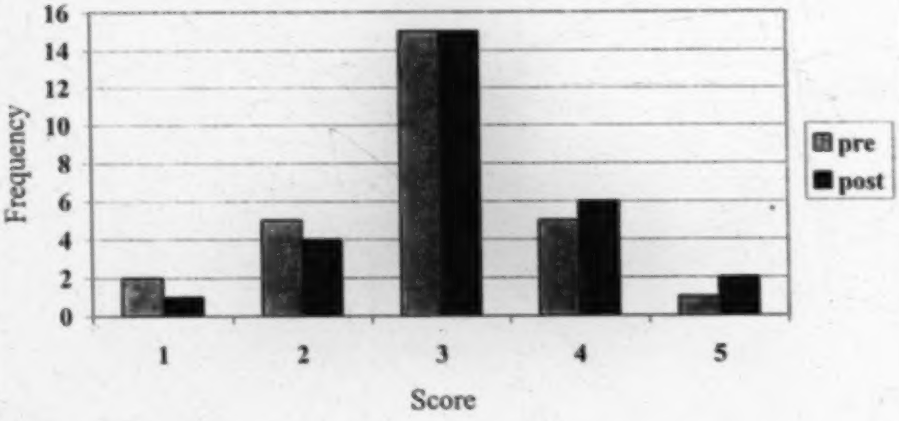


Figure 8. Freqency of responses to "Confidence of teaching EMD" in the experimental group.

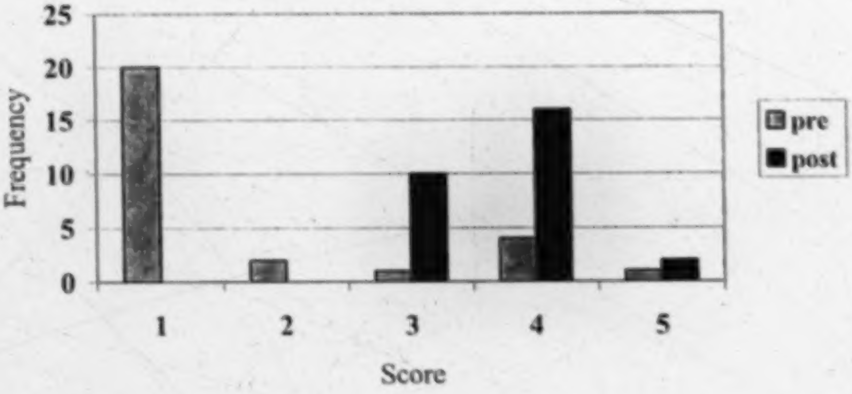


Figure 9. Frequency of responses to "PE majors should learn EMD" in the experimental group without pre-EMD.

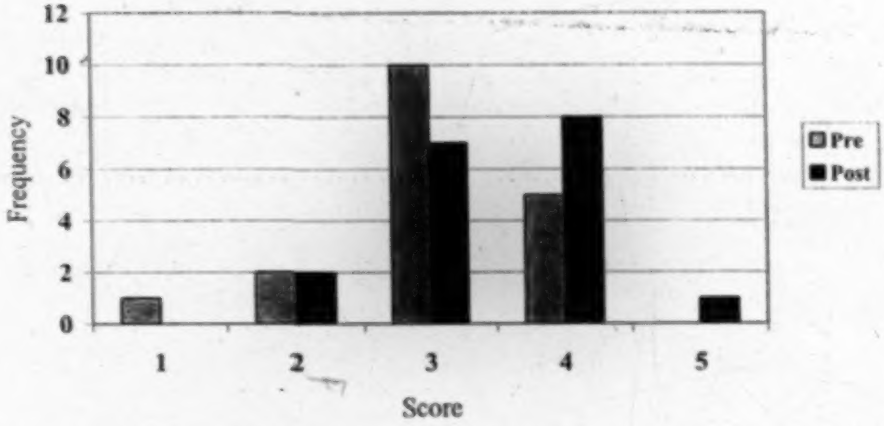


Figure 10. Frequency of responses to "PE minors should learn EMD" in the experimental group without pre-EMD.

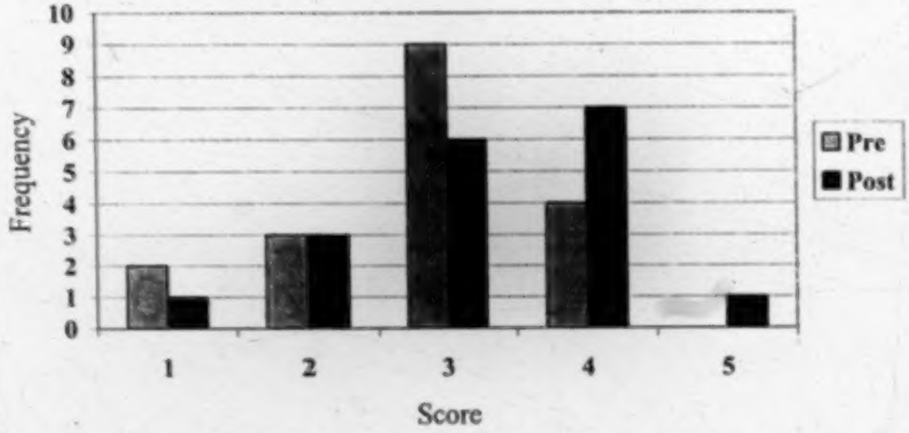


Figure 11. Frequency of responses to "PE teachers should learn EMD" in the experimental without pre-EMD.

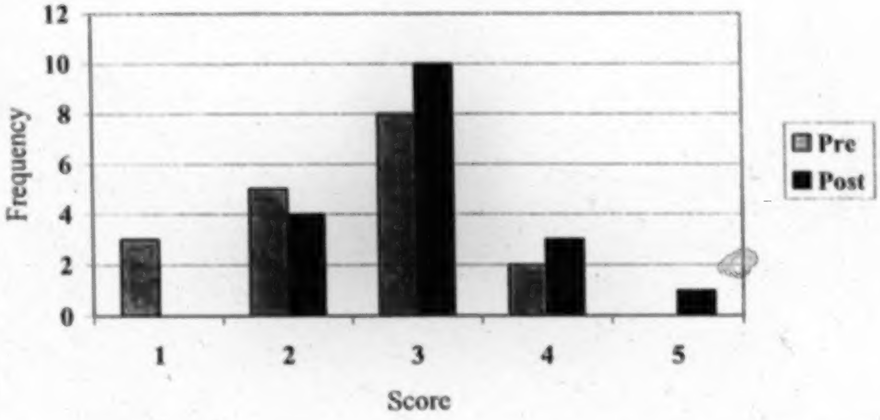


Figure 12. Frequency of responses to "Confidence in teaching EMD" in the experimental group without pre-EMD.

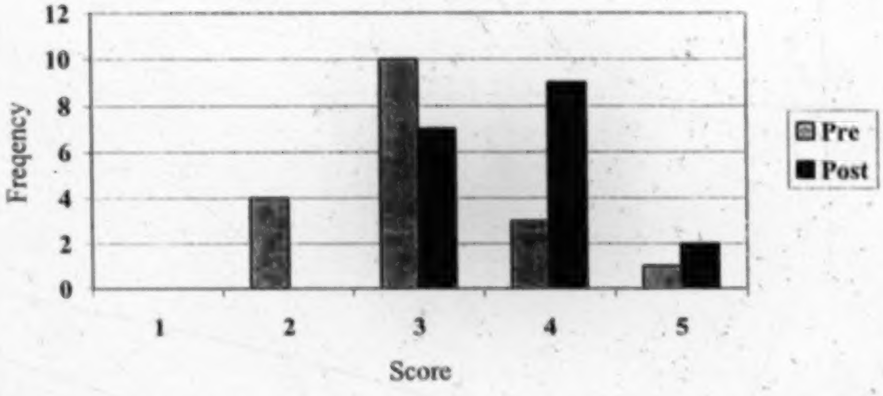


Figure 13. Frequency of responses to "PE majors should learn EMD" in the comparison group.

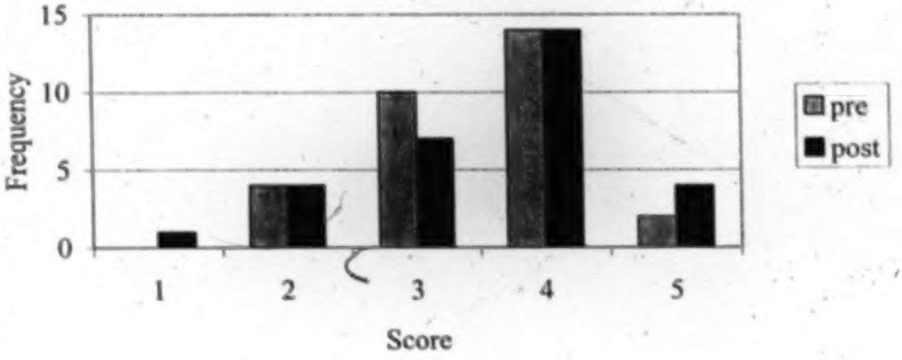


Figure 14. Frequency of responses to "PE minors should learn EMD" in the comparison group.

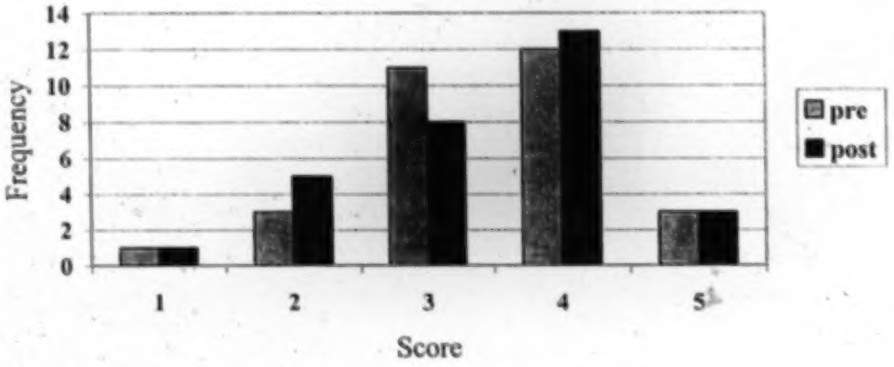


Figure 15. Frequency of responses to "PE teachers should learn EMD" in the comparison group.

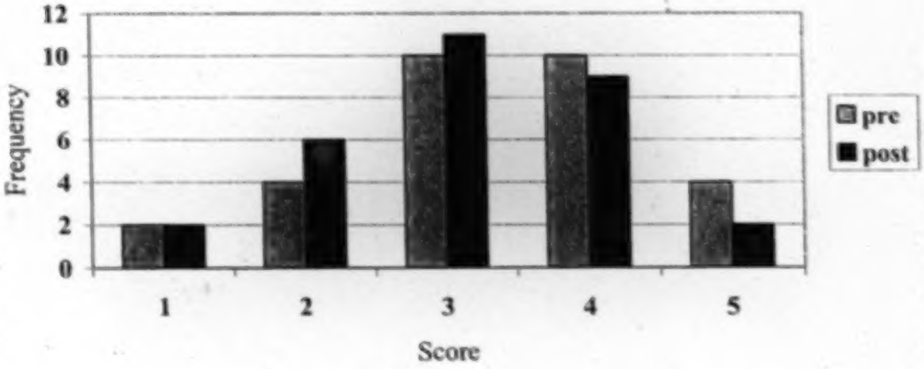


Figure 16. Frequency of responses to "Confidence in teaching EMD" in the comparison group.

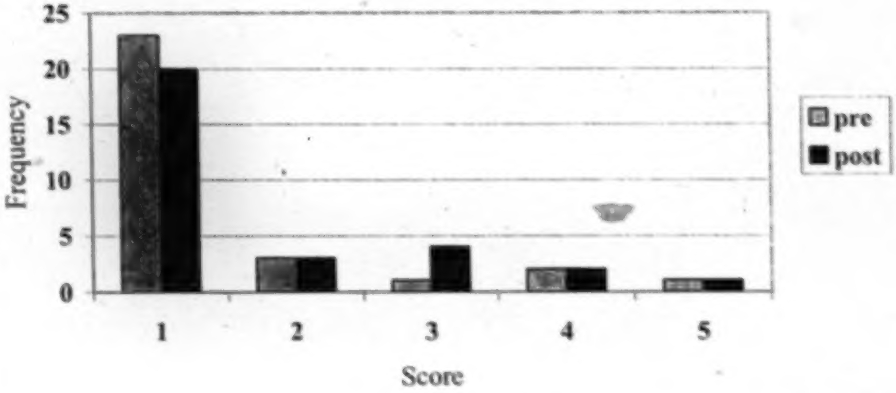


Figure 17. Frequency of responses to "PE Student teachers should learn EMD" in teachers' questionnaires.

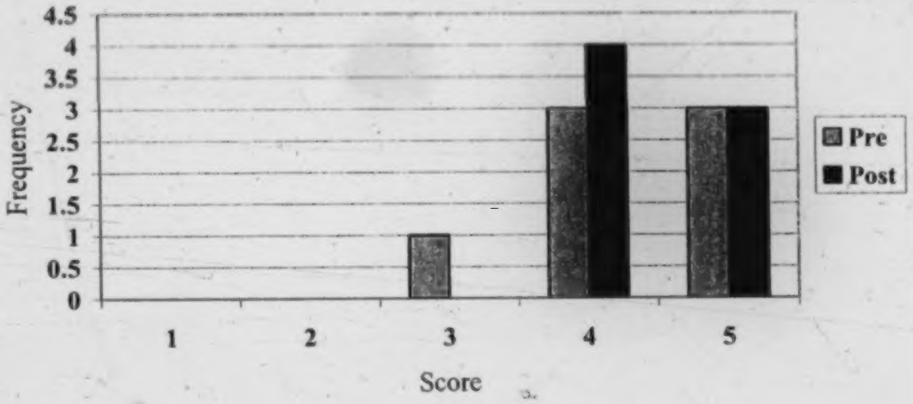


Figure 18. Frequency of responses to "PE teachers should learn EMD" in teachers' questiomnaires.

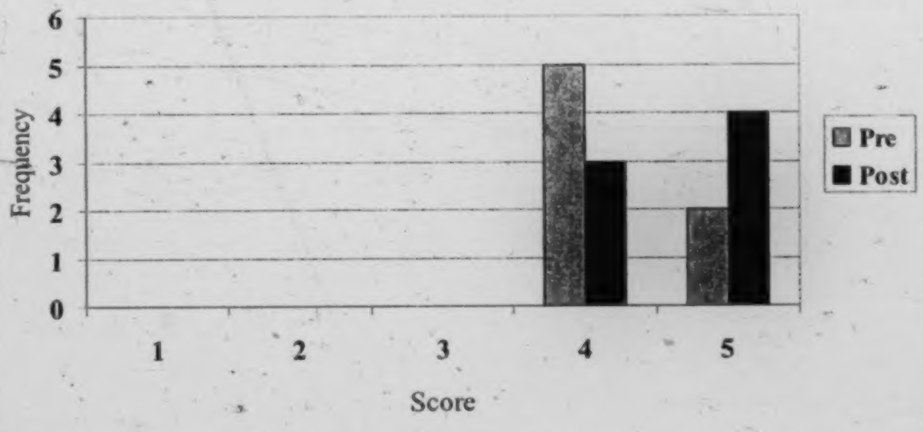


Figure 19. Frequency of responses to "I want to learn EMD" in teachers' questionnaires.

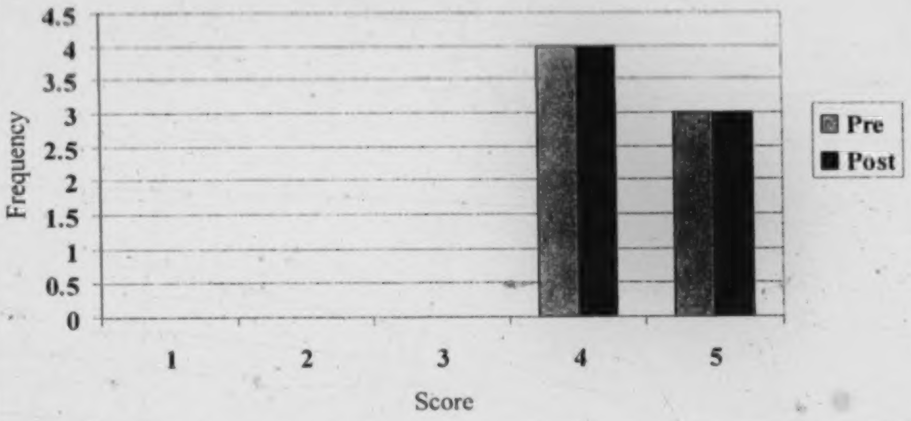
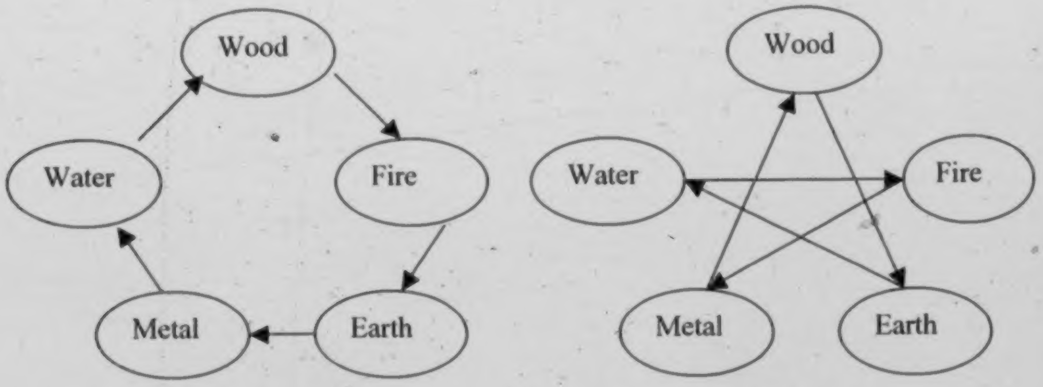


Figure 20. The law of the generating and controlling among the five elements


Wood
Water
Fire
Metal
Earth
Wood
Water
Fire
Metal
Earth

Generating cycle

Controlling cycle

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APPENDICES

Appendix A

Ethics (Student Teacher)

Overview of Research Project

(For Student Teacher Participants)

The purpose of this study is to investigate the Advanced Professional Term (APT) physical education (PE) majors' perceptions of Eastern movement disciplines (EMDs). EMDs include two categories: 1) Eastern martial arts: Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, etc. 2) Eastern meditations: yoga, Qi Gong/Chi Kung, etc. The data from this survey will function as a part of my doctoral research, titled, "East meets West: A cross-cultural inquiry into curriculum theorizing and development in physical education". This survey will be conducted similarly to my previous one with IPT-PE minors.

The significance of the study is to facilitate understanding of the pre-service teachers' (PE majors') view in the process of integrating EMDs in physical education programs. It also would, to a certain extent, help to comprehend those student teachers' experience through a student teaching period in terms of the integration of EMDs into their teaching. In addition, this research project is intended to define one of the researcher's professional research directions in the future, in which a program innovation would be studied in university teacher education program in physical education. The research will be conducted in the two APT classes, one as the experimental group and one as control group. The researcher, as the assistant instructor for the experimental group, will teach 10-minute EMDs in each class during the APT-PE course period.

Four forms of data are involved in this study:

1. Questionnaire: A pre and a post survey will be administered at the first and last APT-PE classes. The first survey will take approximately 15 minutes and the second one 10 minutes to complete. An APT student will supervise (collect and seal the response papers).
2. Interview: A semi-structured interview will be conducted with a selected group of students after final grades in the course have been assigned. It will take approximately 30 minutes. All interviewees will be volunteers and may be selected based on those questionnaires that are identified exceptional, for instance, extreme negative or positive responses, or on indications of particular attitudes in face-to-face talks.
3. Journal keeping (only for experimental group): Participants will be invited to write voluntary journals throughout the APT class period. The journals will not be used for research until the final grade is done. The journals will be returned to participants unless they request the researcher not to do so.
4. Third party observation (only for the experimental group): An observer will attend, without active involvement, the teaching section of EMDs (10 minutes)

and simply record (write down) the participants' reactions during their learning. This will make the research findings more valid in terms of data triangulation. The data from the observer will be not used until final grades of the APT-PE class have been assigned. The observer will sign a "Research Assistant/Transcriber Confidentiality Agreement" to ensure the confidentiality of the participants.

The participants are all adults (university students) who are competent to make a personal decision whether or not they participate.

The following steps will be taken in order to obtain the free and informed consent of the participants:

1. The researcher will, at the first APT-PE class, explain the purpose of the project and indicate that it is voluntary and will not affect students' final grades in any way, and that all their responses to the survey will be coded for confidentiality. All responses to the survey will be assured anonymity in the reporting of the research (e.g., professional and scholarly presentations, theses, and journal article publications) for confidentiality.
2. The researcher will ask the course instructor or an APT student as a supervisor to volunteer to hand out the consent letter, have participants sign them, collect them, and seal them in a envelop while the researcher is absent. There are no limited and/or temporary exceptions to the general requirements for full disclosure of information. There are no circumstances that could compromise the voluntary consent of participants.

Only after all students' grades are done will responses to questionnaires be analyzed, students' journals be collected, and interviews be conducted.

An audiotape will be used during interviews in order to facilitate written data analysis. Written data will be validated by giving back data related to participants and allowing them to respond.

All written responses to the survey can be returned to the participants, or withdrawn or eliminated from the research at the participant's requests without consequences. A copy of any personal responses will be available to each participant.

A possible risk that participants may encounter is that some questions may be of a personal nature. However, the researcher will first ask the participant if he or she feels comfortable to answer or converse during interviews, or allow participants to write "N/A" in responding to questionnaires and avoid submitting journals in order to minimize this possible risk. There are no other known risks, threats, or potential harm to the participants or to others.

The data gathered will be placed in secure areas during the study and will be sealed and kept in a secure place for a minimum of 5 years.

Information Letter

(To Student Teacher Participants)

The purpose of this project is to study physical education (PE) majors' (APT students') views of learning Eastern movement disciplines (EMDs) and the implications of these perceptions in physical education programs. EMDs include two categories: 1) Eastern martial arts: Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, etc. 2) Eastern meditations: yoga, Qi Gong/Chi Kung, etc. This project functions as a part of the researcher's doctoral study, titled, "Eastern meets West: A cross-cultural inquiry into curriculum theorizing and development in physical education". The research will be conducted in the two APT classes, one as the experimental group and one as comparison group. The researcher, as the assistant instructor for the experimental group, will teach 10-minute EMDs in each class during the APT-PE course period.

The following steps will be taken in order to obtain your free and informed consent:

1. The researcher will, at the first APT-PE class, explain to you the purpose of the project and indicate that it is voluntary and it will not be part of your final grades.
2. The researcher will ask the course instructor or one of you as a supervisor to volunteer to hand out consent letters, have sign them if you agree to participate, collect them, and seal them in an envelope while the researcher is absent.

Only after your grades are assigned will your responses to the questionnaires be analyzed, your journals collected (only experimental group), and all interviews conducted.

All of your responses to the survey will be coded for confidentiality. All your responses to the named survey will be assured anonymity in the reporting of the research (e.g., professional and scholarly presentations, theses, and journal article publications) for confidentiality.

A possible risk that you may encounter is that some questions may be of a personal nature. However, the researcher will first ask you if you feel comfortable to answer or converse during interview, or you may write "N/A" in responding questionnaires and may not hand in journals in order to minimize this possible risk. There are no other known risks, threat, or potential harm to you or to others.

The data gathered will be placed in secure areas during the study and will be sealed and kept in a secure place for a minimum of 5 years.

Consent letter

(Student Teacher Participants)

You are invited to participate in a research project that will assist in understanding physical education (PE) majors' views of Eastern movement disciplines (EMDs) and the implications of these perceptions for PE programs. The research involves a graduate student who is going to conduct the study as part of his doctoral research.

Four forms of data are involved in this study:

5. Questionnaire: A pre and a post survey will be administered at the first and last classes of APT-PE. The first survey will take approximately 15 minutes and the second one 10 minutes to complete. The course instructor or an APT student will supervise (collect and seal the response papers).
6. Interview: A semi-structured interview will be conducted with a selected group of students after final grades in the course have been assigned. It will last about 30 minutes. All interviewees will be volunteers and may be selected based on those questionnaires that are identified as exceptional, for instance, extreme negative or positive responses, or on indications of particular attitudes in face-to-face talks.
7. Journal keeping (only for experimental group): Participants will be invited to write voluntary journals throughout the APT-PE class period. The journal will not be collected until the final grade is done. The journals will be returned to participants unless they request the researcher not to do so.
8. Third party observation (only for experimental group): An observer will attend the teaching section of EMDs (10 minutes) and simply record (write down) the participants' reactions during their learning. The data from the observer will be not used until final grades of the APT-PE class have been assigned. The observer will sign a "Research Assistant/Transcriber Confidentiality Agreement" to ensure the confidentiality of the participants.

You, as a participant, have a right to not participate, to withdraw at any time without prejudice to pre-existing entitlements, and to decide at any time whether or not to continue to participate. You can opt out without penalty and any collected data will be withdrawn from the database and not included in the study. All data collected through the study will be coded for confidentiality. The data in the study will be kept for a minimum of five years following completion of research. You also have the right to disclosure of the presence of any apparent or actual conflict of interest on the part of the researcher. In addition, you can request a copy of the report.

This study will primarily used to facilitate the researcher's doctoral study. In the case of concerns, complaints, you can contact:

1. The researcher: Chunlei Lu, office phone 492-5347, or email chunlei@ualberta.ca
2. The researcher's supervisor, Nancy Melnychuk, office phone 492-0543, or email nancy.melnychunk@ualberta.ca

This study has been reviewed and approved by the Research Ethics Board of the Faculties of Education and Extension at the University of Alberta. For questions regarding participant rights and ethical conducts of research, please contact the Chair of the Research Ethics Board at (780) 492-3751.

Participant's name (print)________________________________

Signature_____________________ Date signed_______________

You can use my:
1. Questionnaires: Yes__________ No____________
2. Journal: Yes__________ No____________

You also can contact me for a:
1. Interview: Yes__________ No____________

Questionnaire (Pre-test)

(APT Comparison and Experimental groups)

A survey of APT-PE students' views of Eastern movement disciplines (EMDs)

Name (print)______________________; Date __________________________

Birthday (year/month)__________; gender: F M; Minor______________.

Note: Eastern movement disciplines (EMDs) include 2 categories:

1. Eastern martial arts: Aikido, Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, etc.
2. Eastern meditations: yoga, Qi Gong/Chi Kung, etc.

Please read carefully, circle a number, and give concise written answers where applicable.

1. Have you experienced any EMDs before? If yes, please indicate:

- What type(s): ____
- How long: ____
- Do you still practice/learn: ___________________________________
- Reason(s) to learn: _______________________________________
- Benefits: ____
- How do you like it/them (You can write down the EMDs you learned next to the number if you have learned more than one EMD):

Disagree strongly				Agree strongly
1	2	3	4	5

2. All **PE majors** should learn some EMDs in order to teach in schools. (Please rank)

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

3. All **PE minors** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

____

4. All **in-service PE teachers** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

____

5. To what extent are you willing to learn EMDs as a PE major?

Very unwilling				Very willing
1	2	3	4	5

Why?____

____

____

____

6. How confident would you feel right now to teach EMDs in school PE if you already learned some EMDs?

Not confident				Very confident
1	2	3	4	5

Why?____________________

7. What possible benefits for schools and children would you expect in terms of teaching EMDs in PE?

8. What concerns would you have in terms of teaching EMDs in school PE?

9. How many minutes would you suggest that students learn EMDs in each 3.5-hour APT-PE class?

   5 min 10min 15min 20min other:_______

10. Other thoughts or suggestions?

Questionnaire (Post-test)

(APT Comparison Group)

A survey of APT-PE students' views of Eastern movement disciplines (EMDs)

Name (print)________________________________; Date ____________;

Age ______; Gender: F M; Minor__________________________.

Note: Eastern movement disciplines (EMDs) include 2 categories:

3. Eastern martial arts: Aikido, Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, etc.
4. Eastern meditations: yoga, Qi Gong/Chi Kung, etc.

Please read carefully, circle a number, and give concise written answers where applicable.

11. All **PE majors** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

____

12. All **PE majors** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

____

13. All **in-service PE teachers** should learn some EMDs in order to teach in schools.

Disagree strongly Agree strongly
1 2 3 4 5

Why?____

14. To what extent are you willing to learn EMDs as a PE major?

Very unwilling Very willing
1 2 3 4 5

Why?____

15. How confident do you feel right now to teach EMDs in school PE if you already learned some EMDs?

Not confident Very confident
1 2 3 4 5

Why?____

16. What possible benefits for schools and children would you expect in terms of teaching EMDs in PE?

17. What concerns would you have in terms of teaching EMDs in school PE?

____

____

____

____

18. How many minutes would you suggest that students learn EMDs in each 3.5-hour APT (PE) class?

5 min 10min 15min 20min other:______

19. Other thoughts or suggestions?

____

____

____

____

Questionnaire (Post-test)

(APT Experimental Group)

A survey of APT (PE) students' views of Eastern movement disciplines (EMDs)

Name (print)______________________; Date______________________

Age __________; gender: F M; Minor__________________________

Note: Eastern movement disciplines (EMDs) include 2 categories:

1. Eastern martial arts: Aikido, Tai chi, Kung Fu, Judo, Karate, Tae Kwon Do, etc.
2. Eastern meditations: yoga, Qi Gong/ Chi Kung, etc.

Please read carefully, circle a number, and give concise written answers.

1. After learning EMDs for five and a half weeks, I like this section:

Dislike strongly				Like strongly
1	2	3	4	5

2. All **PE majors** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

____

3. All **PE minors** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

____

____

4. All **in-service PE teachers** should learn some EMDs in order to teach in schools.

Disagree strongly				Agree strongly
1	2	3	4	5

Why?____

5. What benefits have you already gained? And what other benefits might you see in the future?

6. How confident do you feel right now to teach EMDs in school PE after you learned some EMDs in our class?

Not confident				Very confident
1	2	3	4	5

Why?____

7. What possible benefits for schools and children would you expect in terms of teaching EMDs in PE?

Why?____

8. What concerns would you have in terms of teaching EMDs in school PE?

____

____

____

____

9. What are the major changes you have felt in the past 5 and half weeks from learning EMDs (e.g., understanding, perceptions, and views of self and future teaching)?

____

____

____

____

10. How many minutes would you suggest that students learn EMDs in each 3.5-hour APT-PE class?

5 min 10min 15min 20min other:______

11. What other thoughts and suggestions do you have for the EMD session and for the instructor?

____

____

____

____

Interview questions

(APT Comparison Group)

Background information:

- Why want to be a physical education (PE) teacher?
- Your experience of playing sports since you was a Child?
- Family (father, mother, siblings that may affect your growth)?
- The practicum school (size socio-economic settings), grades, content that you taught.

1. How is your practicum going in general? Can you tell a story about how you have experienced or learned about teaching PE?

2. What strikes you about the possibilities, joys, and challenges of teaching PE in the school?

3. What did you feel when Ken's class were learning EMDs and your class did not?

4. Have you ever experienced EMDs before the workshop that I taught? If yes, can you tell what it is? How long? Reasons to learn? Benefits? How much you like it? If you still practice? Can you tell me a story of it?

5. Can you tell me what EMDs mean to you? (If you have not experienced any EMDs, you may have some ideas of EMDs from watching movies or learning from friends who took EMDs).

6. How did your APT course go in general? What impressed you the most and least (What did you like the most/least) in the course and the EMD workshop?

7. Did you find anything appealing about the notion of EMDs? If you did, what appealed to you? What did not appeal to you?

8. Did anything from EMDs surprise you?

9. Has your response or attitude to EMDs changed over time? Or, do you think that your responses or attitude will change when you become a school teacher?

10. What have been the most satisfying things about learning EMDs?

11. What have been the most disappointing aspects about learning EMDs?

12. Do you think it is valuable and necessary to have EMDs in regular school PE programs? Why or why not? What are the values if you think that it is valuable?

13. I noticed that, in your responses or attitude to the pre and post questionnaires, you changed slightly (e.g., "Is it necessary for PE majors, minors, and teachers to learn some EMDs?"). May I know why?

14. What challenges, concerns, and difficulties do you experience or anticipate in trying to integrate EMDs into school PE programs? Can you tell me a story or experience?

15. Are you planning to teach or bring EMDs into PE when you become a schoolteacher? Why or why not?

16. How do you visualize EMDs in a Canadian or Western physical education program?

17. What suggestions do you have to improve our future APT-PE courses that will integrate a session of EMDs?

18. Do you have any thoughts, suggestions, or questions for me and for this interview?

Interview Questions

(APT Experimental Group)

Background information:

- Family (parents, siblings, and relatives that may affect your growth)?
- Your experience of playing sports since you was a Child?
- Why want to be a physical education (PE) teacher?
- The practicum school (size socio-economic settings), grades, content that you taught.

1. How is your APT practicum going? Can you tell a story about how you have experienced or learned about teaching PE?

2. What strikes you about the possibilities, joys, and challenges of teaching PE in the school?

3. How did your APT course go in general? What impresses you the most & least (What do you like the most & least) in the APT course and in EMDs session as well?

4. Can you tell me a story in relation to your personal journey of a student teacher who embraces EMDs?

5. Did you find anything appealing about the notion of EMDs? If you did, what appealed to you? What did not appeal to you?

6. Did anything surprise you with regard to what you learned in using or teaching EMDs?

7. Has your response to EMDs changed over time?

8. What has been most satisfying you about learning or teaching EMDs?

9. What has been most disappointing you about learning or teaching EMDs?

10. Do you think it is valuable to have EMDs in regular school PE programs? Why or why not? What are the values if you think that it is valuable?

11. What challenges, concerns, and difficulties do you experience or anticipate in trying to integrate EMDs into school PE program? Can you tell me a story or experience?

12. Are you planning to teach EMDs when you become a school teacher? Why or why not?

13. How do you visualize EMDs in a Canadian or Western physical education program?

14. What suggestions do you have to improve our future APT-PE courses that will integrate a section on EMDs?

15. Do you have thoughts in relation to this interview or questions for me?

Research Assistant/Transcriber Confidentiality Agreement

Project title: East meets West: A cross-cultural inquiry into curriculum theorizing and development in physical education.

I, ___________________________, the *Research Assistant/Transcriber*, agree to:

1. keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g., disks, tapes, transcripts) with anyone other than the *Researcher(s)*.

2. keep all research information in any form or format (e.g., disks, tapes, transcripts) secure while it is in my possession.

3. return all research information in any form or format (e.g., disks, tapes, transcripts) to the *Researcher(s)* when I have completed the research tasks.

4. after consulting with the *Researcher(s)*, erase or destroy all research information in any form or format regarding this research project that is not returnable to the *Researcher(s)* (e.g., information stored on computer hard drive).

Research Assistant/Transcriber

____________________	____________________	____________________
(print name)	(signature)	(date)

Researcher(s)

____________________	____________________	____________________
(print name)	(signature)	(date)

Appendix B

Ethics (Teacher/Consultant)

Overview of Research Project

(For Teacher/Consultant Participants)

The purpose of this study is to investigate physical education (PE) teachers' and consultants' views of Eastern movement disciplines (EMDs). EMDs include two categories: 1) Eastern martial arts: Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, and Aikido, etc. 2) Eastern meditations: yoga, Qi Gong/Chi Kung, etc. The data from this study will function as a part of my doctoral research, titled, "East meets West: A cross-cultural inquiry into curriculum theorizing and development in physical education". In addition, this research project is intended to define one of the researcher's professional research directions in the future, in which a program innovation would be studied in university teacher education program in physical education.

The significance of the study is to facilitate the researcher's understanding of PE teachers' and consultants' views and concerns of EMDs in the process of integrating EMDs into PE programs in public schools. It also would also provide an opportunity to come to better comprehend the PE teachers/consultants' experience through one or more EMDs workshops presented by the researcher. The workshops are designed to promote PE teachers' and consultants' knowledge and skills of EMDs and sufficient capacity to teach EMDs in their respective school PE programs at a comfortable level. There is no grade or assessment will be conducted in the workshops.

Two forms of data collection are involved in this study:

9. Questionnaire: A pre and a post survey will be administered at the beginning and end of the EMD workshops. Each of the surveys will take approximately 5-10 minute to complete. The researcher will supervise the surveys (collect and seal the response papers).
10. Interview: Semi-structured interviews will be conducted with a selected group of ten PE teachers and consultants, mainly from the workshops mentioned above. The interview will last about 20-30 minutes. All interviewees will be volunteers and will be selected based on exceptional questionnaire responses, for instance, extreme negative or positive responses, or on indications of particular attitudes in face-to-face talks.

The participants are all adults (PE teachers/consultants) who are competent to make a personal decision whether or not to participate.

The following steps will taken in order to obtain the free and informed consent of the participants:

1. The researcher will, at the beginning of EMD workshop and/or interviews, explain the purpose of the project and indicate that it is voluntary and will not affect participants' professional career or participation in the workshops in any way, and that all their responses to the survey will be assured anonymity in the reporting of the research for confidentiality.

2. The researcher will be the supervisor to hand out the consent letter, have participants sign them, collect them, and seal them in an envelope. There are no limited and/or temporary exceptions to the general requirements for full disclosure of information. There are no circumstances that could compromise the voluntary consent of participants.

An audiotape will be used during interviews in order to facilitate written data analysis. Written data will be validated by giving back data related to participants and allowing them to verify.

All written responses to the survey can be returned to the participants, withdrawn, or eliminated from the research at the participant's request without consequences. A copy of any personal responses will be available to each participant.

A possible risk that participants may encounter is that some questions may be of a personal nature. However, the researcher will first ask the participant if he or she feels comfortable in answering questions or conversing during the interview. Respondents will also be allowed to write "N/A" in responding to questionnaires in order to minimize this possible risk. There are no other known risks, threats, or potential harm to the participants or to others.

The data gathered will be placed in a secured area during the study and will be sealed and kept in a secure place for a minimum of 5 years.

Information Letter

(To Teacher/Consultant Participants)

The purpose of this study is to investigate physical education (PE) teachers' and consultants' views of Eastern movement disciplines (EMDs). EMDs include two categories: 1) Eastern martial arts: Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, etc. 2) Eastern meditations: yoga, Qi Gong/Chi Kung, etc. This survey will function as a part of my doctoral research, titled, "East meets West: A cross-cultural inquiry into curriculum theorizing and development in physical education".

The following steps will take in order to obtain your free and informed consent:

3. The researcher will, at the beginning of EMD workshop and/or interviews, explain the purpose of the project and indicate that it is voluntary and will not effect your professional career in any way, and that all your responses to the survey will be assured anonymity in the reporting of the research (e.g., professional and scholarly presentations and journal article publications) for confidentiality.

4. The researcher will be the supervisor to hand out the consent letter, have participants sign them, collect them, and seal them in an envelope.

All written responses to the survey can be returned to you, or withdrawn or eliminated from the research at your request without any consequences. A copy of your personal responses will be available to each of you respectively to verify and edit.

A possible risk you may encounter is that some questions may be of a personal nature. However, the researcher will first ask you if you feel comfortable in answering questions or conversing during interview, and allow you to write "N/A" in responding to questionnaires in order to minimize this possible risk. There are no other known risks, threats, or potential harm to the participants or to others.

The data gathered will be placed in secure areas during the study and will be sealed and kept in a secure place for a minimum of 5 years.

Consent letter

(Teacher/Consultant)

You are invited to participate in a research project that will assist in coming to understand physical education (PE) teachers' and consultants' views of Eastern Movement disciplines (EMDs) and the implications of these perceptions in designing and implementing PE programs. The research involves a graduate student who is conducting the study as part of his doctoral research.

Two forms of data are involved in this study:

1. Questionnaire: A pre and a post survey will be administered at the beginning and end of the EMD workshop. Each of the surveys will take approximately 5-10 minute to complete. The researcher will supervise the surveys (collect and seal the response papers).

2. Interview: Semi-structured interviews will be conducted with a selected group of ten PE teachers and consultants. The interview will last about 20-30 minutes. All interviewees will be volunteers.

You, as a participant, have a right to not participate, to withdraw at any time without prejudice to pre-existing entitlements. You can opt out without penalty and any collected data will be withdrawn from the database and not included in the study. All data collected through the study will be assured anonymity in the reporting of the research (e.g., professional and scholarly presentations and journal article publications) for confidentiality. The data in the study will be kept for a minimum of five years following completion of the research. You have the right to the disclosure of the presence of any apparent or actual conflict of interest on the part of the researcher. In addition, you can request a copy of the final report.

This study will primarily used to facilitate the researcher's doctoral study. In the case of concerns, complaints, you can contact:

- The researcher: Chunlei Lu, office phone 492-5347, or email chunlei@ualberta.ca
- The researcher's supervisor, Nancy Melnychuk, office phone 492-0543, or email nancy.melnychunk@ualberta.ca

This study has been reviewed and approved by the Research Ethics Board of the Faculties of Education and Extension at the University of Alberta. For questions regarding participant rights and ethical conducts of research, please contact the Chair of the Research Ethics Board at (780) 492-3751.

My contact phone number(s) ____

and/or email____

Participant's name (print)_______________________________________

Signature__________________________ Date signed_________________

Questionnaire (Pre-test)

(PE teachers & consultants)

Please Note: Eastern movement disciplines (EMDs) include 2 categories:

- *Eastern martial arts: Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, Aikido, etc.*
- *Eastern meditations: yoga, Qi Gong/Chi Kung, etc.*

Please read carefully and give concise answers.

1. Have you experienced any Eastern movement disciplines (**EMDs**) before? If yes, please indicate:
    - What type(s): ________________________________
    - How long: ________________________________
    - Do you still practice/learn: ________________________
    - Reason(s) to learn: ________________________
    - Benefits: ________________________________
    - How do you like it/them (You can write down the EMDs you learned next to the number if you have learned more than one EMD):

Disagree strongly				Agree strongly
1	2	3	4	5

2. I want to learn Eastern movement disciplines (please rank)?

Do not want				want strongly
1	2	3	4	5

Why?

____

____

____

____

3. All PE teachers should learn some Eastern movement disciplines in order to teach in schools? Why or why not?

Disagree				strongly agree
1	2	3	4	5

Why?

____

____

____

4. All student teachers (PE majors and minors) in universities should learn some Eastern movement disciplines in order to teach in schools? Why or why not?

Disagree				strongly agree
1	2	3	4	5

Why?

____

____

____

5. What personal benefits do you expect from learning Eastern movement disciplines?

____

____

____

6. What possible benefits for your students do you expect from teaching Eastern movement disciplines in school PE programs?

____

____

____

7. What concerns would you have in teaching Eastern movement disciplines in school PE?

____

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____

Questionnaire (Post-test)

(PE teachers & consultants)

Please Note: Eastern movement disciplines include 2 categories:

- *Eastern martial arts: Tai Chi, Kung Fu, Judo, Karate, Tae Kwon Do, Aikido, etc.*
- *Eastern meditations: yoga, Qi Gong/Chi Kung, etc.*

Please read carefully and give concise answers.

1. After learning Eastern movement disciplines from this workshop, to what extent, do you think that you like EMDs (please rank):

Dislike				like strongly
1	2	3	4	5

Why?

2. I want to learn more Eastern movement disciplines (having more Eastern movement disciplines workshop)?

Do not want				want strongly
1	2	3	4	5

Why?

3. All PE teachers should learn some Eastern movement disciplines in order to teach in schools? Why or why not?

Disagree				strongly agree
1	2	3	4	5

Why?____

____

____

____

4. All student teachers (PE majors and minors) in universities should learn some Eastern movement disciplines in order to teach in schools? Why or why not?

Disagree				strongly agree
1	2	3	4	5

Why?____

____

____

____

5. What personal benefits do you think that you got from learning Eastern movement disciplines?

____

____

____

____

6. What benefits for your students do you expect from teaching Eastern movement disciplines in school PE programs?

____

____

____

____

7. What concerns, challenges, and difficulties do you have in teaching EMDs in school PE?

Interview Questions

(Teacher/Consultant)

Background information:

- Family (parents, siblings, and relatives that may affect your growth)?
- Your experience of playing sports since you was a Child?
- Why want to be a physical education (PE) teacher?
- The practicum school (size socio-economic settings), grades, content that you taught.
- Name, size, & social environments of your school;
- grades & class size that you have been teaching & coaching.

1. Generally speaking in your career, how have you enjoyed your teaching?
2. Can you tell a story about how you have experienced about teaching/consulting PE?
3. What the joys and challenges of teaching/consulting PE in the school?
4. What impresses you the most & least (What do you like the most & least) in teaching/consulting PE?
5. Have you ever experienced EMDs (Eastern Movement Disciplines including Eastern martial arts and Eastern meditations) before the workshop that I taught? If yes, can you tell what it is? How long? Reasons to learn? Benefits? How much you like it? Whether you still practice? Can you tell me a story of it? Can you identify an occasion where you have been exposed to EMDs? May I know what drives you to learn EMDs from this workshop?
6. Tell me a brief story in relation to your personal journey as a teacher /consultant who is interested in or accepts EMDs?
7. Did you find anything appealing about the notion of EMDs? If you did, what appealed to you? What did not appeal to you?
8. Was there anything that surprised you in learning (or teaching) EMDs?
9. Has your feeling about EMDs changed over time since the first experience with them?
10. What have you found to be most rewarding or satisfying since you have been learning (or teaching) EMDs?
11. What have you found to be difficult or frustrating about EMDs?

12. What do you think are the values of having EMDs in a regular school PE program?

13. Would you consider integrating EMDs in your PE classes, either on you own or by getting help of EMDs instructors from outside? Why or why not?

14. What challenges, concerns, and difficulties might you experience or anticipate in trying to integrate EMDs into school PE programs? Can you tell me a story or experience?

15. How do you foresee integrating EMDs into Canadian or Western physical education programs?

16. What do you see the value of integrating EMDs into PE teacher education programs?

17. In relation to the workshop and this interview, do you have any thoughts or suggestions that you like to share? Do you have any questions for me?

9

Appendix C

Prompt questions for student teacher participants' journal writing

Section A - "Getting to know you"

1. How do you like to spend your spare time?
2. What do you think is most important in life to most people? What do you think will be most important in life to you?
3. Who has been your most important friend? What has made that person special to you?
4. Who has been a most important family member? What has made that person special to you?
5. What is the most difficult thing you've ever had to do? How did you go about it?
6. In all of the things that you are interested in or that you've thought about a lot, what has puzzled you the most?
7. If you could spend two weeks with a special person—someone you like or someone that does a special kind of work—who would that be and what would you look forward to doing together?
8. What are your most significant intercultural experiences?
9. Is there something you've always wanted to do or try, but just haven't had the chance yet? What is it and what are the obstacles?

Section B – Teaching/Learning physical education

1. Who was your most memorable PE teacher? What makes that person stand out in your memory?
2. What do you think one needs to learn in order to be a good PE teacher? (Is it only knowing how to play sports enough?)
3. What activity or experience in PE was very influential for you? How and why?
4. What are your biggest concerns about becoming a teacher?
5. In your own experiences as a student, what have been your own responses or strategies when the learning has been difficult? Is there a particular subject area or topic you can use to give an example of that?
6. How is the PE class different from the content of your other courses this term?
7. How do you experience your classmates or the classroom climate in the courses you are currently taking?
8. How do you think you would deal with cultural conflict among students when you are a teacher?
9. When you started this term, why did you want to be a teacher? Have any of those thoughts or reasons changed?

Section C - Your experiences with EMDs during the APT-PE class

1. When we worked with Eastern Movement Disciplines (EMDs) today, what aspects were most new or novel for you?
2. Prior to this course, what were your preconceptions or images of anyone who is an EMD instructor?

3. If EMD instruction was included in all public schools, how do you think this would affect life in schools?
4. When you tell others that you are learning EMDs, what is their first reaction and what is your response to their comments or questions?
5. What parts or aspects of the EMD section of our course do you most like or dislike?
6. Do the EMD sessions affect you in any way? How would you describe your response?
7. How do your experiences with EMDs in our course fit in with, contradict, or change your understanding of other things (e.g., nature, life, self, culture, human beings)?
8. Do you think you might want to integrate EMDs into your future teaching? If not, why not? If yes, what would be your biggest concerns about doing so?
9. How confident would you feel about teaching EMDs to others? What has given you confidence? What could support increased confidence?

Appendix D

Outlines for EMD session and workshop

Qi Gong

Qi Gong is an ancient Chinese meditation with more than 6000 years history. It becomes more and more popular because of its simple movements and the physical, psychosocial, and educational benefits. This session will focus on the basic theory and hands-on learning Qi Gong for beginners. Tactics and strategies of teaching Qi Gong for beginners will be explained in relation to the provincial new physical education curriculum.

1. The possible ABCD outcomes through learning Qi Gong, based on the provincial new physical education curriculum in this province, would be:

- Activity: Application of Basic Skills;
- Benefits of Health: Functional Fitness and Well-being;
- Cooperation: Teamwork; and
- Do it Daily: Effort, Safety, Goal-setting, and Active Living in the Community.

2. Basic theory in Qi Gong

- **Qi:** vital energy, air, philosophical concept, etc.
- **Gong:** work or the result of practice.
- **Yin:** symbol of the moon, female, quiet, cold, etc.
- **Yang:** symbol of the sun, male, energetic, hot, etc.
- **Dan Tian:** the place that reserves vital energy. Upper one (brain), middle one (chest), & lower one (stomach).
- **Xue Wei:** acupoint. More than 360 acupoints cross the body.
- **Jing Luo:** symmetrical meridians (channels) through many acupoints connect all parts of body.

3. Directions of practicing "Natural Qi Gong"

- **Preparation:** Facing south, stand/sit/lie down with a shoulder's apart, bending knees chest & chin in slightly, closing teeth, and tongue against the hard palate.
- **Adjustments:**
    a. Adjust body: check head, shoulders, arms, trunk, knees, and feet.
    b. Adjust breath: inhale and exhale deep, breathe using abdominal breathing.
    c. Adjust mind: 1) eyes focus on one thing in front of you; or 2) focus on your breathing; or 3) gently close eyes and think lower Dan Tian as a red hot ball.
- **Collecting Qi (close eyes if feel comfortable; breathe follows natural movements):**
    a. Palms face south (front),
    b. Collect good Qi back.

c. Pour it into upper Dan Tian
d. Use middle fingers lead Qi down pass mouth and swallow
e. Lead Qi and saliva directly cross the middle Dan Tian into lower Dan Tian.
f. Repeat b--d using palms facing north (back), heaven, earth, and east/west (People who suffer hypertension may pour Qi into lower Dan Tian each time after collecting Qi from 6 directions, and swallow and use mind to direct saliva into lower Dan Tian)

- **Ending:** wash hands (and pat body and walk around quietly).

4. Cautions:

- **People who suffer epilepsy, hysteria, emotional disorder, and other severe diseases may not learn and practice Qi Gong.**
- **Make sure to do Ending part if terminating practice any time when having urgent affairs, interruption, uncomfortable feeling, etc.**

* * *

Tai Chi (Tai Ji Quan)

Tai Chi has been advocated by CAHPERD for health and physical education programs. Numerous studies have indicated the physical, psychosocial, and educational benefits of learning/practicing Tai Chi. This session will focus on the basic theory and hands-on learning Tai Chi for beginners. Tactics and strategies of teaching Tai Chi for beginners will be explained in relation to the provincial new physical education curriculum. An overhead projector is needed for presentation.

1. The possible ABCD outcomes through learning Qi Gong, based on the new physical education curriculum in this province, would be:

- Activity: Application of Basic Skills;
- Benefits of Health: Functional Fitness and Well-being;
- Cooperation: Teamwork; and
- Do it Daily: Effort, Safety, Goal-setting, and Active Living in the Community.

2. Basic theory in Tai Ji Quan

- Tai Ji as a philosophical concept
- Tai Ji Quan
- Styles of Tai Ji Quan

3. Directions of practicing Tai Chi

- **Preparation:** Facing south, stand/sit/lie down with a shoulder's apart, bending knees chest & chin in slightly, closing teeth, and tongue against hard palate.
- **Adjustments:**
  a. Adjust body: check head, shoulders, arms, trunk, knees, and feet.

b. Adjust breath: inhale and exhale deep, breathe using abdominal breathing.
c. Adjust mind: 1) eyes focus on one thing in front of you; or 2) focus on your breathing; or 3) gently close eyes and think lower Dan Tian as a red hot ball.

- Tai Chi Level 1: Commencing and ending part of Tai Chi.
- Tai Chi Level 2: Form of Brush Peacock's Tail.
- Tai Chi Level 3: Tai Chi Form 6 (six moves).